STIC Search Report
EIC 3700

STIC Database Tracking Number: 156537

TO: Andrea Ragonese
Location: RND 7c59
Art Unit: 3743
Wednesday, June 29, 2005

Case Serial Number: 09/769746

From: Ethel Leslie
Location: EIC 3700
RND 8A34
Phone: 571-272-5992

Ethel.leslie@uspto.gov

Search Notes

Andrea,

Attached is the completed search. I searched the inventors in the patent literature and the results are attached. I did an extensive search on the requested topic in bibliographic and full-text databases as well as on the Internet. I found several items that I think might be help you – they are marked with red flags – but please look over all the results as there may be other items of interest. I have attached the search strategies used for the searches performed.

If you have a moment, please fill out the attached STIC Feedback Form. If there is anything I can do to refine or revise this search, please let me know.

Sincerely,
Ethel Leslie

Solomon, Terrance

From: Unknown@Unknown.com
Sent: Wednesday, June 15, 2005 1:08 PM
To: STIC-EIC3700
Subject: Generic form response

ResponseHeader=Commercial Database Search Request

AccessDB#= 156537

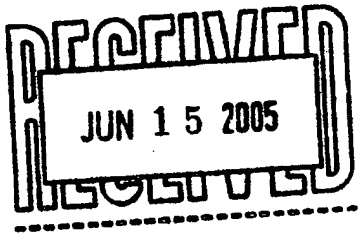
LogNumber= _____

Searcher= _____

SearcherPhone= _____

SearcherBranch= _____

MyDate=Wed Jun 15 13:07:33 EDT 2005



submitto=STIC-EIC3700@uspto.gov

Name=Andrea Ragonese

Empno=77465

Phone=571-272-4804

Artunit=3743

Office=RND 7C59

Serialnum=09769746

PatClass=606/194

Earliest=01/25/2001

Format1=paper

Searchtopic=Inserting a catheter through a pre-exisiting NATURAL septal opening in the heart wall, instead of driving a hole.

Comments=SPE Henry Bennett would like this case expedited, if at all possible. Thank you.

send=SEND

```
Set     Items   Description
S1    3138001   CATHETER? OR TUBE? ? OR TUBING OR TUBULAR OR CANNULA? OR C-
             ANULA? OR STENT? OR PIPE OR PIPING OR INTUBAT? OR PROSTHE? OR
             SHUNT? OR BYPASS??? OR BY()PASS?? OR INDWELL??? OR  IMPLANT? -
             OR ELONGAT?(3N)(BODY OR BODIES OR MEMBER?)
S2    4005888   HEART? OR CORONAR? OR VENTRIC? OR ATRIA? ? OR ATRIUM? ? OR
             INTERVENTRIC? OR ARTIOVENTRIC? OR INTERATRIA? OR ATRIORUM()CO-
             RDIS OR MYOCARDIA?
S3    5000118   INTERSTITIAL? OR INTER()STITIAL? OR MEMBRANE? OR WALL? ? OR
              SEPTAL? OR SEPTUM? OR SEPTA
S4    2178180   OPENING? OR PASSAG? OR HOLE? ? OR WINDOW? OR OUTLET? OR IN-
             LET? OR CHANNEL?
S5      24852   OVAL??(N)(FOSSA? ?) OR (PATENT? ? OR OVALE? ?)(N) FORAMEN?
             OR PFO OR ASD OR VSD
S6    8533649   INSERT? OR ENTER??? OR IMPLANT? OR INTERJECT? OR INTRODUC?
             OR ADMINIST? OR ADMIT???? OR ADMISSION
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S8    6844893   PY=2002:2003
S9       9577   S2(5N)S3(5N)S4
S10    913618   S1(5N)S6
S11       125   S9 (S) S10
S12       107   S11 NOT S7:S8
S13        63   RD (unique items)
S14     34004   S9 OR S5
S15       457   S14 (10N) S10
S16       277   S15 NOT S7:S8
S17      7108   S2(3N)S3(3N)S4
S18     31614   S17 OR S5
S19       209   S18 (5N) S10
S20       127   S19 NOT S7:S8
S21        63   RD (unique items)
S22        59   S13 NOT S21
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File   5:Biosis Previews(R) 1969-2005/Jun W3
         (c) 2005 BIOSIS
File   6:NTIS 1964-2005/Jun W3
         (c) 2005 NTIS, Intl Cpyrght All Rights Res
File  34:SciSearch(R) Cited Ref Sci 1990-2005/Jun W4
         (c) 2005 Inst for Sci Info
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File  35:Dissertation Abs Online 1861-2005/Jun
         (c) 2005 ProQuest Info&Learning
File  73:EMBASE 1974-2005/Jun 28
         (c) 2005 Elsevier Science B.V.
File 144:Pascal 1973-2005/Jun W3
         (c) 2005 INIST/CNRS
File 155:MEDLINE(R) 1951-2005/Jun W3
         (c) format only 2005 The Dialog Corp.
File  94:JICST-EPlus 1985-2005/May W2
         (c)2005 Japan Science and Tech Corp(JST)
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Set      Items   Description
S1     3138001   CATHETER? OR TUBE? ? OR TUBING OR TUBULAR OR CANNULA? OR C-
             ANULA? OR STENT? OR PIPE OR PIPING OR INTUBAT? OR PROSTHE? OR
             SHUNT? OR BYPASS??? OR BY()PASS?? OR INDWELL??? OR  IMPLANT? -
             OR ELONGAT?(3N)(BODY OR BODIES OR MEMBER?)
S2     4005888   HEART? OR CORONAR? OR VENTRIC? OR ATRIA? ? OR ATRIUM? ? OR
             INTERVENTRIC? OR ARTIOVENTRIC? OR INTERATRIA? OR ATRIORUM()CO-
             RDIS OR MYOCARDIA?
S3     1267223   MYOCARDI???? OR PERICARDI???? OR EPICARDI???? OR ENDOCARDI-
             ????
S4     5000118   INTERSTITIAL? OR INTER()STITIAL? OR MEMBRANE? OR WALL? ? OR
              SEPTAL? OR SEPTUM? OR SEPTA
S5     2178180   OPENING? OR PASSAG? OR HOLE? ? OR WINDOW? OR OUTLET? OR IN-
             LET? OR CHANNEL?
S6       24852   OVAL??(N)(FOSSA? ?) OR (PATENT? ? OR OVALE? ?)(N) FORAMEN?
             OR PFO OR ASD OR VSD
S7     8533649   INSERT? OR ENTER??? OR IMPLANT? OR INTERJECT? OR INTRODUC?
             OR ADMINIST? OR ADMIT???? OR ADMISSION
S8     4556746   PY=2004:2005
S9     6844893   PY=2002:2003
S10       7575   S2:S3(3N)S4(3N)S5
S11     891092   S1(3N)S7
S12         10   S10 (10N) S11
S13     913618   S1(5N)S7
S14     891092   S11 (S) S13
S15         91   S10 (S) S13
S16         75   S15 NOT S8:S9
S17         44   RD (unique items)
S18     195820   S2(3N)S4
S19      12295   (S18 OR S3)(3N)S5
S20        130   S19 (S) S13
S21         80   S20 NOT S15
S22         53   S21 NOT S8:S9
S23         30   RD (unique items)
S24   11040571   PRE()EXIST??? OR PREEXIST??? OR PREVIOUS? OR PRIOR? OR PRE-
             CED? OR ANTECED? OR FORERUN? OR BEFORE OR EARLIER
S25   13750613   EXIST??? OR PRESENT? OR OCCUR? OR HAPPEN?
S26    3415372   NATURAL? OR UNARTIFICIAL? OR NONARTIFICIAL? OR INARTIFICIA-
             L? OR ARTIFICIAL? OR REAL
S27        265   S19 (5N) S24:S26
S28          6   S11 (S) S27
S29          6   S28 (S) S1
S30         51   S27 (S) S1
S31         45   S30 NOT S28
S32         27   S31 NOT S8:S9
S33         11   RD (unique items)
? show files
File   5:Biosis Previews(R) 1969-2005/Jun W3
         (c) 2005 BIOSIS
File   6:NTIS 1964-2005/Jun W3
         (c) 2005 NTIS, Intl Cpyrght All Rights Res
File  34:SciSearch(R) Cited Ref Sci 1990-2005/Jun W4
         (c) 2005 Inst for Sci Info
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File  35:Dissertation Abs Online 1861-2005/Jun
         (c) 2005 ProQuest Info&Learning
File  73:EMBASE 1974-2005/Jun 28
         (c) 2005 Elsevier Science B.V.
File 144:Pascal 1973-2005/Jun W3
         (c) 2005 INIST/CNRS
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File 155:MEDLINE(R) 1951-2005/Jun W3
(c) format only 2005 The Dialog Corp.
File 94:JICST-EPlus 1985-2005/May W2
(c)2005 Japan Science and Tech Corp(JST)

21/5/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0013239249 BIOSIS NO.: 200100411088
Development and testing of the Helex septal occluder, a new expanded polytetrafluoroethylene atrial septal defect occlusion system
AUTHOR: Zahn Evan M (Reprint); Wilson Neil; Cutright Warren; Latson Larry A
AUTHOR ADDRESS: Miami Children's Hospital, 3200 SW 60th Court, Suite 104, Miami, FL, 33155, USA**USA
JOURNAL: Circulation 104 (6): p711-716 August 7, 2001 2001
MEDIUM: print
ISSN: 0009-7322
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Background: A variety of transcatheter atrial septal defect (ASD) occluders are currently in use around the world. Although for the most part effective, all of these devices lack features that would be desirable in a "perfect" device. The Helex septal occluder is a new type of device designed to improve the results of transcatheter ASD closure. This study was designed to examine the effectiveness and safety of this occluder in an animal model. Methods and Results: The Helex was implanted into 24 dogs with surgically created ASDs. Procedural details focusing on deployment, removal, and early closure rates were examined. Follow-up consisted of sequential transesophageal echocardiography and fluoroscopy as well as epicardial contrast echocardiography and angiography at the time of death. Specimens were examined grossly and histologically, and devices were tested for metal fatigue. All animals had successful **ASD** closure. **Implantation** was uncomplicated (mean fluoroscopy time 11.7 minutes), and removal or repositioning was always possible. Closure rate as judged by transesophageal echocardiography was 88% initially and 100% at 2-week follow-up. Devices rapidly became infiltrated with connective tissue without inflammation and were endothelialized over time. There were no instances of thromboembolism. A single wire-frame fracture occurred secondary to a prototype delivery system malfunction. Conclusions: The Helex septal occluder proved safe and effective for ASD closure. Several advantages over currently available devices were evident in this model. Controlled prospective clinical trials are needed.

DESCRIPTORS:
MAJOR CONCEPTS: Equipment, Apparatus, Devices and Instrumentation; Cardiovascular System--Transport and Circulation
BIOSYSTEMATIC NAMES: Canidae--Carnivora, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: dog (Canidae)--animal model
COMMON TAXONOMIC TERMS: Animals; Carnivores; Chordates; Mammals; Nonhuman Vertebrates; Nonhuman Mammals; Vertebrates
METHODS & EQUIPMENT: Helex septal occluder--effectiveness, laboratory equipment, safety; polytetrafluorethylene atrial septal defect occlusion system--laboratory equipment; transcatheter atrial septal defect closure--surgical method
CONCEPT CODES:
12512 Pathology - Therapy
14504 Cardiovascular system - Physiology and biochemistry
BIOSYSTEMATIC CODES:
85765 Canidae

21/5/2 (Item 2 from file: 5)

0013188926 BIOSIS NO.: 200100360765
[Multiple paradoxical emboli in a patient with a patent foramen ovale]
ORIGINAL LANGUAGE TITLE: Multiple paradoxe Embolien bei offenem Foramen ovale
AUTHOR: Knobloch W (Reprint); Schlèsinger A; Jacksch R
AUTHOR ADDRESS: Klinik fuer Kardiologie, Betriebsteil St. Vincenz-Krankenhaus, Katholische Kliniken Essen-Nord gGmbH, Von Bergmann Strasse 2, 45141, Essen, Germany**Germany
JOURNAL: DMW Deutsche Medizinische Wochenschrift 126 (24): p717-721 15 Juni, 2001 2001
MEDIUM: print
ISSN: 0012-0472
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: German

ABSTRACT: History and clinical findings: A 38-year-old man was admitted because of angina pectoris with concomitant dyspnoea. Three months previously he had suffered an ischaemic stroke of the right middle cerebral artery and was treated in a neurological department. At that time, no aetiologic diagnosis was possible. There was no history of other diseases. Pulse rate was 100 beats per minute with a blood pressure of 140/60 mm Hg. The left calf had a 4 cm greater circumference without any symptoms. The rest of the physical examination in the markedly overweight patient was normal. Investigations: The ECG showed sinus rhythm and negative T-waves in leads V1-V4 and a slightly elevated ST-segments in II, III and aVF. An acute coronary thrombosis was ruled out by left heart catheter-angio. Diagnosis, treatment and course: Within the following hours, embolic occlusion of the left popliteal artery developed and was treated with a Fogarty catheter. On the first postoperative day, the patient complained about mild dysaesthesia of his right arm. Duplex sonography showed a flotating thrombus in the left carotid bifurcation. The thrombus was removed surgically. Later a pulmonary embolism due to deep vein thrombosis in the left thigh and calf was found. Transoesophageal echocardiography performed in another hospital previously was repeated and a patent foramen ovale (PFO) with a middle-sized shunt was found. The **patent foramen ovale** was closed percutaneously by **implanting** a Cardioseal-Starflex occluder. There was neither a complication nor a residual shunt. Neurological symptoms disappeared completely within the next few months. The patient has now been free from new neurological events for 11 months. Conclusion: In patients with PFO, paradoxical embolism remains a challenging diagnosis that can be made highly probable by documentation of venous thromboses, pulmonary embolism, missing evidence of atherosclerosis in the vessels of the embolized organ and exclusion of other cardiovascular sources of emboli and prothrombotic coagulation disorders. Interventional closure of a patent foramen ovale appears to be the treatment of choice in proven paradoxical embolism.

DESCRIPTORS:
MAJOR CONCEPTS: Cardiovascular Medicine--Human Medicine, Medical Sciences
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: human (Hominidae)--adult, male, patient
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
DISEASES: angina pectoris--heart disease, vascular disease; ischemia--vascular disease; paradoxical embolism--vascular disease, diagnosis,

treatment; patent foramen ovale--congenital disease, heart disease, treatment; pulmonary embolism--respiratory system disease, vascular disease, diagnosis; venous thrombosis--vascular disease, diagnosis
MESH TERMS: Angina Pectoris (MeSH); Ischemia (MeSH); Embolism, Paradoxical (MeSH); Heart Septal Defects, Atrial (MeSH); Pulmonary Embolism (MeSH); Thrombophlebitis (MeSH)
METHODS & EQUIPMENT: ECG {electrocardiography}--monitoring method
MISCELLANEOUS TERMS: Case Study
CONCEPT CODES:
14506 Cardiovascular system - Heart pathology
14508 Cardiovascular system - Blood vessel pathology
16006 Respiratory system - Pathology
25503 Development and Embryology - Pathology
BIOSYSTEMATIC CODES:
86215 Hominidae

21/5/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0012971597 BIOSIS NO.: 200100143436
Transcatheter closure of large atrial septal defects in adults with the Amplatzer occluder acute and follow-up results in 95 patients
AUTHOR: Sievert Horst (Reprint); Zadan Elisabeth (Reprint); Horvath Kathrin (Reprint); Krumsdorf Ulrike (Reprint); Schraeder Rainer (Reprint); Fach Andreas U (Reprint); Scherer Detlef (Reprint); Merle Hartmut (Reprint); Spies Hans (Reprint); Zeplin Harald; Lissmann-Jensen Hildegard U
AUTHOR ADDRESS: CV Ctr Bethanien CCB, Frankfurt, Germany**Germany
JOURNAL: Circulation 102 (18 Supplement): pII.767 October 31, 2000 2000
MEDIUM: print
CONFERENCE/MEETING: Abstracts from American Heart Association Scientific Sessions 2000 New Orleans, Louisiana, USA November 12-15, 2000; 20001112
SPONSOR: American Heart Association
ISSN: 0009-7322
DOCUMENT TYPE: Meeting; Meeting Abstract; Meeting Poster
RECORD TYPE: Citation
LANGUAGE: English
DESCRIPTORS:
MAJOR CONCEPTS: Equipment, Apparatus, Devices and Instrumentation; Cardiovascular Medicine--Human Medicine, Medical Sciences; Methods and Techniques
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: human (Hominidae)--adolescent, adult, aged, middle age, patient
ORGANISMS: PARTS ETC: atrium--circulatory system; pulmonary artery--circulatory system
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
DISEASES: atrial septal defect--congenital disease, heart disease, treatment; thrombus--blood and lymphatic disease, vascular disease
MESH TERMS: Heart Septal Defects, Atrial (MeSH); Thrombosis (MeSH)
METHODS & EQUIPMENT: Amplatzer ASD occluder {Amplatzer atrial septal defect occluder}--medical equipment; Amplatzer **ASD** occluder **implantation** {Amplatzer atrial septal defect occluder **implantation** }--surgical method, therapeutic method; transcatheter closure method--complications, therapeutic method; transesophageal echocardiography--diagnostic method, imaging method
MISCELLANEOUS TERMS: Qs:Qp ratio; atrial septal defect diameter; fluoroscopy time; mean procedure time; pulmonary artery pressure;

Meeting Abstract; Meeting Poster; Meeting Abstract; Meeting Poster
CONCEPT CODES:
25000 Pediatrics
00520 General biology - Symposia, transactions and proceedings
11105 Anatomy and Histology - Surgery
12504 Pathology - Diagnostic
12512 Pathology - Therapy
14504 Cardiovascular system - Physiology and biochemistry
14506 Cardiovascular system - Heart pathology
14508 Cardiovascular system - Blood vessel pathology
15006 Blood - Blood, lymphatic and reticuloendothelial pathologies
24500 Gerontology
25503 Development and Embryology - Pathology
BIOSYSTEMATIC CODES:
86215 Hominidae

21/5/5 (Item 5 from file: 5)

0012714009 BIOSIS NO.: 200000432322
Transesophageal echocardiographic monitoring for transcatheter closure of atrial septal defect
AUTHOR: Tseng Hsiang-Chien; Hsiao Po-Ni; Lin Yu-Hua; Wang Jou-Kou; Tsai Shen-Kou (Reprint)
AUTHOR ADDRESS: Department of Anesthesiology, National Taiwan University Hospital, 7 Chung-Shan South Road, Taipei, Taiwan**Taiwan
JOURNAL: Journal of the Formosan Medical Association 99 (9): p684-688 September, 2000 2000
MEDIUM: print
ISSN: 0929-6646
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Background and purpose: Transcatheter closure of atrial septal defect (ASD) is generally performed under fluoroscopy alone. Recently, we have used transesophageal echocardiography (TEE) monitoring as an aid in performing this procedure. The purpose of this study was to evaluate the efficacy and complications associated with this use of TEE. Methods: Transcatheter closure of ASD was accomplished under TEE guidance simultaneously with fluoroscopic imaging in 11 patients aged 3 to 33 years (weight, 15.4-62.9 kg). TEE was successfully performed in all patients after endotracheal general anesthesia. The ASDs were reexamined before catheterization. The appropriate placement of the occluder device was evaluated. Results: Seven cases were uneventful with successful **ASD** occluder **implantation** , but one failed because of a large ASD (24.7 mm). In three cases, transcatheter closure was aborted after TEE examination, one with a large ASD (27.05 mm), one with an ASD that was too small, and one with multiple fenestrated ASDs. Conclusions: Routine TEE monitoring for transcatheter closure of ASDs is effective for evaluation of **ASD** before **implantation** of an occluder, to ensure the proper seating of the occluder after the defect occlusion is complete.

DESCRIPTORS:
MAJOR CONCEPTS: Cardiovascular Medicine--Human Medicine, Medical Sciences ; Methods and Techniques
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: human (Hominidae)--patient

COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
DISEASES: atrial septal defect--congenital disease, heart disease, transcatheter closure
MESH TERMS: Heart Septal Defects, Atrial (MeSH)
METHODS & EQUIPMENT: atrial septal occluder implantation--therapeutic method; fluoroscopic imaging--imaging method; transesophageal echocardiography--monitoring method
CONCEPT CODES:
25503 Development and Embryology - Pathology
12512 Pathology - Therapy
14506 Cardiovascular system - Heart pathology
BIOSYSTEMATIC CODES:
86215 Hominidae

21/5/7 (Item 7 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0012298790 BIOSIS NO.: 200000017103
Transcatheter closure of atrial-septal defects and patent foramen ovale in adults: Optimal anatomic adaptation of occlusion device
AUTHOR: Hoepp H W (Reprint); Deutsch H J; La Rosee K; Schnabel P; Terheggen G; Schneider C A; Korsten J; Babic U U
AUTHOR ADDRESS: Klinik III fuer Innere Medizin, Universitaet zu Koeln, Joseph-Stelzmann-Str. 9, 50924, Koeln, Germany**Germany
JOURNAL: American Heart Journal 138 (5 PART 1): p941-949 Nov., 1999 1999
MEDIUM: print
ISSN: 0002-8703
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Background For transcatheter closure of atrial-septal defects, different occlusion systems are available. The purpose of this study was to examine the clinical feasibility of the ASD Occlusion System (ASDOS, Dr Osypka GmbH, Grenzach-Wyhlen, Germany) and to evaluate the short- and long-term results. Methods and Results The study was composed of 20 consecutive patients with atrial-septal secundum defect (n = 13) or **patent foramen ovale** (n = 7). The device **implantation** was successful in all patients. For optimal closure of the defect, left atrial and right atrial umbrellas of different sizes were required in 10 of 20 patients. No major short- or long-term complications occurred. During the mean follow-up period of 13.9 +- 5 months, 5 strut fractures without dislocation were observed, and in 8 (40%) of 20 patients transesophageal echocardiography revealed a small residual shunt. Conclusion The ASDOS double umbrella system is suitable for transcatheter closure of interatrial defects in sele cted patients. This system showed a high procedural safety and has the unique advantage of individual adaptation of the occluding device on the defect anatomy that results in high closure effectiveness.

DESCRIPTORS:
MAJOR CONCEPTS: Cardiovascular Medicine--Human Medicine, Medical Sciences
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: human (Hominidae)--patient
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
DISEASES: atrial-septal defects--heart disease

MESH TERMS: Heart Septal Defects, Atrial (MeSH)
METHODS & EQUIPMENT: transcatheter closure--therapeutic method; transesophageal echocardiography--diagnostic method
CONCEPT CODES:
14501 Cardiovascular system - General and methods
12504 Pathology - Diagnostic
12512 Pathology - Therapy
BIOSYSTEMATIC CODES:
86215 Hominidae

21/5/9 (Item 9 from file: 5)

0011801338 BIOSIS NO.: 199900060998
Transcatheter closure of atrial septal defect and patent foramen ovale with ASDOS device (A multi-institutional European trial)
AUTHOR: Sievert Horst (Reprint); Babic Uros U; Hausdorf Gerd; Schneider Martin; Hoepp Hans W; Pfeiffer Dietrich; Pfisterer Matthias; Friedli Beat ; Urban Philip
AUTHOR ADDRESS: Cardiovascular Center Bethanien CCB, Im Pruefling 17-23, 60839 Frankfurt, Germany**Germany
JOURNAL: American Journal of Cardiology 82 (11): p1405-1413 Dec. 1, 1998 1998
MEDIUM: print
ISSN: 0002-9149
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: A clinical trial was conducted to assess the feasibility, safety, and efficacy of the atrial septal defect (ASD) occlusion system for transcatheter closure of secundum ASD and patent foramen ovale (PFO) after episodes of cerebral embolism. Occlusion was attempted in 200 patients aged 1 to 74 years (mean 32). The procedure failed in 26 patients (13%); the device was retrieved through a catheter in 20 and through surgery in 6 patients. Procedure-related complications necessitating surgical removal of the device included device embolization in 2, device entrapment within the Chiari network in 1, frame fracture in 1, and perforation of atrial wall in 2. All 6 patients experienced an uneventful postoperative course. An additional 11 patients (6%) underwent surgical removal of the device during follow-up. There were 163 patients (8 1 %) with an **implanted ASD** occlusion system at follow-up of from 6 to 36 months (mean 17). Thrombus formation around the device was detected by transesophageal echocardiography in 9 patients 1 to 4 weeks after implantation. One of these patients (who had a coagulation factor XII deficiency) suffered a cerebral thromboembolism. Late atrial wall perforation (5, 6, and 8 months after implantation) occurred in 3 adult patients. Infectious endocarditis developed in 2 adult patients (1%). No late device embolization and no atrioventricular valve injury occurred. An asymptomatic device frame fracture was found in 14% and frame deformity in 4% of all patients during the follow-up period of >230 patient-years. Immediately after closure, a moderate/large residual shunt remained in 8% and a small shunt in 29% of patients. After 1 year, a moderate/large shunt was present in 2% and a small one in 26% of patients. During a total follow-up of 49 patient-years, only 1 of 46 patients with PFO had a transient neurologic event after the closure. The study indicates that patients with centrally situated secundum ASD and those with PFO after cerebral embolism can be treated with this system with a high success rate and an acceptable morbidity.

DESCRIPTORS:
MAJOR CONCEPTS: Cardiovascular Medicine--Human Medicine, Medical Sciences ; Equipment, Apparatus, Devices and Instrumentation
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: human (Hominidae)--adult, patient, child
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
DISEASES: atrial septal defect--congenital disease, heart disease; cerebral embolism--nervous system disease, vascular disease; patent foramen ovale--congenital disease, heart disease
MESH TERMS: Heart Septal Defects, Atrial (MeSH); Intracranial Embolism and Thrombosis (MeSH); Heart Septal Defects, Atrial (MeSH)
METHODS & EQUIPMENT: atrial septal defect occlusion system device--efficacy, medical equipment, safety, feasibility; transcatheter closure--complications, therapeutic method, outcomes; transesophageal echocardiography--diagnostic method
MISCELLANEOUS TERMS: morbidity
CONCEPT CODES:
14501 Cardiovascular system - General and methods
06502 Radiation biology - General
10502 Biophysics - General
12502 Pathology - General
12504 Pathology - Diagnostic
12512 Pathology - Therapy
20501 Nervous system - General and methods
25000 Pediatrics
25502 Development and Embryology - General and descriptive
BIOSYSTEMATIC CODES:
86215 Hominidae

21/5/11 (Item 11 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0010741184 BIOSIS NO.: 199799375244
Percutaneous balloon dilatation of the atrial septum: Immediate and midterm results
AUTHOR: Thanopoulos B D (Reprint); Georgakopoulos D; Tsaousis G S; Simeunovic S
AUTHOR ADDRESS: Dep. Paediatr. Cardiol., Aghia Sophia Child. Hosp., 1 Thivon and Levadias St., Athens 115 27, Greece**Greece
JOURNAL: Heart (London). 76 (6): p502-506 1996 1996
ISSN: 1355-6037
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Objectives: To assess the effectiveness of atrial septostomy by percutaneous balloon dilatation in patients with congenital heart defects or primary pulmonary hypertension. Patients and design: Twenty three patients (15 boys, eight girls; aged 10 days to 10 years; 17 with congenital heart defects and six with primary pulmonary hypertension), all hemodynamically unstable under optimal medical treatment, underwent atrial septostomy by percutaneous balloon dilatation. Interventions: The balloon **catheter entered** the left atrium through a **patent foramen ovale** (n = 14) or via transseptal puncture in cases with an intact atrial septum (n = 9). The size of the balloons used ranged from 13 to 18 mm. Results: There were no complications. The interatrial communication

(mm) increased (P lt 0.05) after dilatation and remained unchanged (P = NS) during a 16.6 (13.8) month follow up (2 (1.7) v 8.8 (1.4) v 8.2 (1.1), respectively). Transatrial gradient (mm Hg) fell and arterial oxygenation (%) improved both in patients with transposition (6.3 (0.8) v 0.8 (1) (P = 0.0001) and 40.6 (4.2) v 76.5 (4.8) (P = 0.0001), respectively) and in those with mitral atresia (13.4 (1.9) v 2 (1.4) (P = 0.0001) and 77.1 (3.9) v 81.5 (4.2) (P = 0.008), respectively). There were two failures, one early and one late, both in the group of patients with mitral atresia or stenosis. A decrease in arterial oxygenation (94.8 (1.5) v 83 (2.4), P = 0.004) and an increase in left atrial pressure (6.8 (0.9) v 8.3 (1.2), P = 0.02) and cardiac index (2.3 (0.2) v 3.1 (0.2) 1/min/m-2, P = 0.002) was observed in patients with primary pulmonary hypertension. Conclusions: Percutaneous balloon dilatation is an effective and safe procedure for creating an adequate interatrial communication that can be used as an alternative to blade septostomy.

DESCRIPTORS:
MAJOR CONCEPTS: Cardiovascular Medicine--Human Medicine, Medical Sciences ; Pediatrics--Human Medicine, Medical Sciences
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: human (Hominidae)
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
MISCELLANEOUS TERMS: ATRIAL SEPTUM; CARDIOVASCULAR MEDICINE; CHILD; CIRCULATORY SYSTEM; CONGENITAL DISEASE; CONGENITAL HEART DEFECT; FEMALE ; HEART DISEASE; IMMEDIATE RESULTS; MALE; MIDTERM RESULTS; PATIENT; PEDIATRICS; PERCUTANEOUS BALLOON DIALATATION; PULMONARY HYPERTENSION; THERAPEUTIC METHOD; VASCULAR DISEASE
CONCEPT CODES:
12512 Pathology - Therapy
14506 Cardiovascular system - Heart pathology
14508 Cardiovascular system - Blood vessel pathology
25000 Pediatrics
BIOSYSTEMATIC CODES:
86215 Hominidae

21/5/12 (Item 12 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0009534086 BIOSIS NO.: 199598001919
Radiofrequency ablation of left-sided accessory pathways: Transaortic versus transseptal approach
AUTHOR: Manolis Antonis S (Reprint); Wang Paul J; Estes N A Mark III
AUTHOR ADDRESS: Div. Cardiol., Box 868, Tufts/New England Med. Cent., 750 Washington St., Boston, MA 02111, USA**USA
JOURNAL: American Heart Journal 128 (5): p896-902 1994 1994
ISSN: 0002-8703
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: The aim of this study was to compare the efficacy of transaortic (n = 54) and transseptal (n = 28) techniques during radiofrequency (RF) ablation of left accessory pathways (n = 75) in both left posteroseptal and free-wall locations in 73 consecutive patients (mean age 32 +- 15 years). The transseptal approach included transseptal puncture and use of a retained long sheath in the left atrium (n = 24) or direct **insertion** of the mapping/ablation **catheter** via a **patent foramen ovale** (n =

4). Transseptal RF ablation was used as the primary method in 23 patients or at a separate session after the transaortic RF ablation failed in 5 patients. Transaortic RF ablation was used as primary method in 50 patients and after failed transseptal ablation in 4 patients. Transaortic ablation was successful in 47 (87%) of 54 procedures, transseptal ablation in 24 (86%) of 28 procedures, with total RF ablation success in 70 (96%) of 73 patients. The transseptal puncture/long sheath method was successful in 23 (96%) of 24 patients. This latter technique resulted in more stable positioning and easier manipulation of the ablation catheter. Switching from transseptal puncture/long sheath to transaortic technique was needed in 1 of 24 patients, from transseptal/patent foramen ovale approach to the transaortic route in 3 of 4 patients, and from the transaortic to the transseptal approach at a separate session in 5 patients. The age of patients and number of RF lesions were similar in the two groups. Fluoroscopy time was lower for the transseptal group (81 +- 57 vs 121 +- 81 min; p lt 0.05). All complications (1 tamponade/3 vascular) occurred in the transaortic group. Recurrences over a period of 13 +- 9 months included 5 (11%) in the transaortic and 1 (4%) in the transseptal group. We conclude that, although the transaortic and transseptal methods appear to be complementary, the transseptal puncture/long sheath technique offers advantages that include high success rate, less need for crossover to the transaortic technique, shorter radiation exposure, and a lower complication rate.

DESCRIPTORS:

MAJOR CONCEPTS: Biochemistry and Molecular Biophysics; Blood and Lymphatics--Transport and Circulation; Cardiovascular Medicine--Human Medicine, Medical Sciences; Cardiovascular System--Transport and Circulation; Equipment, Apparatus, Devices and Instrumentation; Methods and Techniques; Pathology

BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia

ORGANISMS: human (Hominidae)

COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates

MISCELLANEOUS TERMS: LONG SHEATH TECHNIQUE; THERAPEUTIC METHOD; TRANSSEPTAL PUNCTURE

CONCEPT CODES:

10502 Biophysics - General
10504 Biophysics - Methods and techniques
10511 Biophysics - Bioengineering
12004 Physiology - Instrumentation
12006 Physiology - Methods
12504 Pathology - Diagnostic
12512 Pathology - Therapy
14501 Cardiovascular system - General and methods
14504 Cardiovascular system - Physiology and biochemistry
14506 Cardiovascular system - Heart pathology
14508 Cardiovascular system - Blood vessel pathology
15002 Blood - Blood and lymph studies

BIOSYSTEMATIC CODES:

86215 Hominidae

21/5/14 (Item 14 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

0009021321 BIOSIS NO.: 199497042606

Mechanisms of incomplete cardioplegia distribution during coronary artery surgery

AUTHOR: Voci Paolo (Reprint); Bilotta Federico; Caretta Quintilio;

Chiarotti Flavia; Mercanti Corrado; Marino Benedetto
AUTHOR ADDRESS: Via S. Giovanni Eudes 27, 00163 Roma, Italy**Italy
JOURNAL: Anesthesiology 79 (5): p904-912 1993 1993
ISSN: 0003-3022
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Background. Cardioplegia is used to protect the myocardium from ischemic injury during open-heart surgery. However, the delivery of cardioplegic solutions may be impaired by anatomic and/or functional conditions, such as the development of transient aortic regurgitation during antegrade **administration** of cardioplegia or **shunting** through a **foramen ovale** during retrograde administration. In this study, the authors used a new method of cardioplegia administration, based on intraoperative contrast echocardiography, to detect on-line causes of inadequate cardioplegia delivery. Methods: Forty patients with coronary artery disease and a competent aortic valve, who were treated consecutively, were enrolled in this study. Patients were monitored intraoperatively by transesophageal contrast echocardiography during cardioplegia delivery. Antegrade cardioplegia was administered into the aortic root following aortic occlusion in all patients. Twenty-two patients also received retrograde cardioplegia, administered through the right atrium. The echocontrast agent consisted of a stable suspension of 5% human albumin microbubbles with a concentration of 4 cntdot 10-8 microbubbles/ml and a diameter of 4 +- 1 mu. Results. Antegrade cardioplegia was not associated with aortic regurgitation in 23 of 40 (58%) patients. Seven patients (17%) had only mild aortic regurgitation, four patients (10%) had moderate regurgitation, and six (15%) had severe aortic regurgitation. The percent of myocardial opacification was 76.0 +- 10.5 in the 23 patients who did not have aortic regurgitation, 76.0 +- 17.0 in the 7 patients who had mild regurgitation, 52.5 +- 18.1 in the 4 patients who had moderate regurgitation, and 48.5 +- 18.3 in 6 patients who had severe aortic regurgitation (Kruskal-Wallis stat, 12.9; P lt 0.005). Retrograde cardioplegia was not associated with right-to-left shunt in 11 of 22 patients (50%). In seven patients (32%), there was only a mild passage of contrast material to the left atrium. In the remaining four patients (18%), there was a moderate (one patient) to severe (three patients) right-to-left shunt at the level of the fossa ovalis. Conclusions: This study shows that incomplete myocardial distribution of cardioplegia, secondary to transient aortic valve incompetence or shunting through the foramen ovale, is not uncommon in patients undergoing coronary surgery.

DESCRIPTORS:
MAJOR CONCEPTS: Cardiovascular Medicine--Human Medicine, Medical Sciences ; Cardiovascular System--Transport and Circulation; Surgery--Medical Sciences
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: human (Hominidae)
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
MISCELLANEOUS TERMS: CORONARY ARTERY DISEASE; SURGICAL METHOD; THERAPEUTIC METHOD
CONCEPT CODES:
10504 Biophysics - Methods and techniques
11105 Anatomy and Histology - Surgery
12512 Pathology - Therapy
14501 Cardiovascular system - General and methods
14506 Cardiovascular system - Heart pathology

14508 Cardiovascular system - Blood vessel pathology
BIOSYSTEMATIC CODES:
86215 Hominidae

21/5/16 (Item 16 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0008218925 BIOSIS NO.: 199293061816
ROLE OF BUTTONED DOUBLE-DISC DEVICE IN THE MANAGEMENT OF ATRIAL SEPTAL DEFECTS
AUTHOR: RAO P S (Reprint); WILSON A D; LEVY J M; GUPTA V K; CHOPRA P S
AUTHOR ADDRESS: DIV PEDIATRIC CARDIOL, UNIV WISCONSIN CHILDREN'S HOSPITAL, MADISON, WIS 53792, USA**USA
JOURNAL: American Heart Journal 123 (1): p191-200 1992
ISSN: 0002-8703
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: Sixteen patients seen over a 9-month period ending in August 1990 were offered transcatheter closure of their ASD with a custom-made "buttoned" double-disc device. The study was approved by the Institutional Review Board and informed consent was obtained in each case. The device consists of an occluder, a counteroccluder, and a loading wire and is delivered to the ASD site via an 8F sheath. Parents of two children elected surgical closure. In five children the stretched diameter of the ASD was too large (> 20 mm) and transcatheter closure was not attempted. These seven children underwent elective surgical closure without incident. In one child the defect measured 5 mm and the Qp:Qs was 1.4:1 and therefore ASD closure was not recommended. In the remaining eight children transcatheter closure was attempted. In two of the children the occluder pulled through the ASD and was successfully retrieved and the children later underwent uneventful elective surgical closure. The device was **implanted** across the **ASD** in six children. In one child the device dislodged from the **ASD** site within minutes after **implantation** and the child was sent to emergency surgery, where the device was removed and the ASD was closed. In the remaining five patients, aged 7 months to 45 years (weight 3.6 to 50 kg), with a Qp:Qs range of 1.3 to 2.3 and a stretched diameter of 10 to 19 mm, the ASD closure was sucessful with 25 to 40 mm size devices. Repeat echo-Doppler studies 2 weeks and 3 months after the procedure in all patients and 6 months later in two children did not reveal any residual shunt. It is concluded that (1) the custom-made "buttoned" double-disc device can be **implanted** across the **ASD** safely and effectively via an 8F sheath, thus making transcatheter ASD closure feasible even in very young infants; (2) measurement of stretched diameter of the ASD in the catheterization laboratory is a useful guide for selection of an appropriate-sized device; and (3) additional clinical trials are warranted to confirm the efficacy and safety of the device.
DESCRIPTORS: HUMAN DEFECT SIZING DEVICE SIZING SAFETY EFFECTIVENESS
DESCRIPTORS:
MAJOR CONCEPTS: Cardiovascular Medicine--Human Medicine, Medical Sciences ; Methods and Techniques; Pediatrics--Human Medicine, Medical Sciences; Surgery--Medical Sciences
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
CONCEPT CODES:

10511 Biophysics - Bioengineering
11105 Anatomy and Histology - Surgery
12512 Pathology - Therapy
14506 Cardiovascular system - Heart pathology
14508 Cardiovascular system - Blood vessel pathology
25000 Pediatrics
BIOSYSTEMATIC CODES:
86215 Hominidae

21/5/21 (Item 21 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0002188690 BIOSIS NO.: 197764037046
THE PROGNOSIS IN EBSTEINS DISEASE OF THE HEART LONG-TERM FOLLOWING-UP OF 22 PATIENTS
AUTHOR: FISCHER HANSEN J; LETH A; DORPH S; WENNEVOLD A
JOURNAL: Acta Medica Scandinavica 201 (4): p331-335 1977
ISSN: 0001-6101
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: Unspecified

ABSTRACT: A follow-up study of 22 patients with Ebstein's anomaly was performed. Nine patients died 1-21 yr (mean 9) after the initial admission while the 13 patients alive at the end of the observation period were followed for 5-26 yr (mean 15). Clinical, ECG, radiological, and hemodynamic features were analyzed with reference to their prognostic significance. The presence or absence of cyanosis due to right-to-left shunt through an atrial septal defect (ASD) distinguished best between a good and a poor prognosis. Right-sided heart failure and dyspnea at rest, often associated with palpitations, precordial pains and syncopes, were grave prognostic findings. After the initial signs of heart failure there was a rapid deterioration, death ensuing within a few years. Operation with **insertion** of a **prosthetic** valve (and closure of the **ASD**) should be seriously considered at the appearance of heart failure.

DESCRIPTORS: HEART FAILURE ATRIAL SEPTAL DEFECT CYANOSIS DYSPNEA PROSTHESIS ELECTRO CARDIOGRAM
DESCRIPTORS:
MAJOR CONCEPTS: Cardiovascular Medicine--Human Medicine, Medical Sciences ; Development
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
CONCEPT CODES:
01012 Methods - Photography
06504 Radiation biology - Radiation and isotope techniques
10012 Biochemistry - Gases
10504 Biophysics - Methods and techniques
10511 Biophysics - Bioengineering
11105 Anatomy and Histology - Surgery
11106 Anatomy and Histology - Radiologic anatomy
12504 Pathology - Diagnostic
12510 Pathology - Necrosis
12512 Pathology - Therapy
14501 Cardiovascular system - General and methods
14502 Cardiovascular system - Anatomy
14506 Cardiovascular system - Heart pathology

14508 Cardiovascular system - Blood vessel pathology
15002 Blood - Blood and lymph studies
16006 Respiratory system - Pathology
25552 Development and Embryology - Descriptive teratology and teratogenesis
BIOSYSTEMATIC CODES:
86215 Hominidae

21/5/23 (Item 2 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

09046912 Genuine Article#: 359ZA Number of References: 17
Title: The Amplatzer septal occluder
Author(s): Walsh KP (REPRINT) ; Maadi IM
Corporate Source: OUR LADYS HOSP SICK CHILDREN,/DUBLIN 12//IRELAND/ (REPRINT)
Journal: CARDIOLOGY IN THE YOUNG, 2000, V10, N5 (SEP), P493-501
ISSN: 1047-9511 Publication date: 20000900
Publisher: GREENWICH MEDICAL MEDIA LTD, 137 EUSTON RD, LONDON NW1 2AA, ENGLAND
Language: English Document Type: ARTICLE
Geographic Location: IRELAND
Subfile: CC CLIN--Current Contents, Clinical Medicine
Journal Subject Category: PEDIATRICS; CARDIAC & CARDIOVASCULAR SYSTEMS
Abstract: The Amplatzer Septal Occluder is made from a Nitinol wire mesh shaped into 2 disks with a connecting waist, which serves to center the device in the defect while occluding it. The Amplatzer device is also available in a configuration with no central waist for use in patients with patent oval foramen, or multiperforated aneurysm of the interatrial septum. For the purposes of this review, we analysed our experience using the Amplatzer device in 150 patients with interatrial communications. Of these, 104 had a defect within the oval fossa, 33 a patent oval foramen, and 13 had undergone fenestration of a Fontan procedure. Of those with defects within the **oval fossa** , a device was **implanted** in 100 patients, and 2 of these patients subsequently required surgical intervention, 1 because of migration and the other because of malformation of the device. Of the remaining 98 patients, complete occlusion has been achieved in 90% at 1 year. Any residual leaks are either trivial or small. In those with a patent oval foramen, the septal occluder was used to close 20, whilst the device designed specifically for this purpose was used in 13. On follow-up contrast echocardiography, only 2 patients have a small residual right-to-left shunt. Complete occlusion was achieved for all the Fontan fenestrations, although 1 patient later underwent surgery for baffle dehiscence. Other significant complications occurred in 2 patients who developed deep vein thrombosis, and 3 patients who suffered transient supraventicular arrhythmias. Although the Amplatzer device has been in clinical use for only 3 years, its unique design, and ease of use, has resulted in its widespread adoption by many centres. The results to date are very encouraging, but it must be remembered that there is, as yet, no long-term followup data available for this life-long implant.
Descriptors--Author Keywords: atrial septal defect ; patent oval foramen ; Fontan fenestration ; interventional cardiology
Identifiers--KeyWord Plus(R): TRANSCATHETER CLOSURE; CLINICAL-EXPERIENCE; OCCLUSION DEVICE; DEFECT CLOSURE
Cited References:
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CRAGG AH, 1993, V189, P775, RADIOLOGY
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21/5/24 (Item 3 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

08521453 Genuine Article#: 296JV Number of References: 7
Title: Septic paradoxical embolus through a patent foramen ovale **after pacemaker** implantation
Author(s): Allie DE (REPRINT) ; Lirtzman MD; Wyatt CH; Vitrella DA; Walker CM
Corporate Source: S LOUISIANA CLIN RES FDN,CARDIOVASC INST S, 4212 W CONGRESS ST, SUITE 2100/LAFAYETTE//LA/70506 (REPRINT)
Journal: ANNALS OF THORACIC SURGERY, 2000, V69, N3 (MAR), P946-948
ISSN: 0003-4975 Publication date: 20000300
Publisher: ELSEVIER SCIENCE INC, 655 AVENUE OF THE AMERICAS, NEW YORK, NY 10010
Language: English Document Type: ARTICLE
Geographic Location: USA
Subfile: CC LIFE--Current Contents, Life Sciences; CC CLIN--Current Contents, Clinical Medicine
Journal Subject Category: SURGERY; CARDIAC & CARDIOVASCULAR SYSTEMS; RESPIRATORY SYSTEM
Abstract: A case of a septic paradoxic embolus due to an infected pacemaker lead associated with a patent foramen ovale (PFO) is described. Treatment consisted of immediate intracardiac embolectomy, pericardial patch closure of the PFO, total removal of the infected pacemaker lead and generator, and placement of a new permanent epicardial lead pacemaker system. (C) 2000 by The Society of Thoracic Surgeons.
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WARD R, 1995, V108, P549, CHEST
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21/5/25 (Item 4 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

07841768 Genuine Article#: 214MV Number of References: 8
Title: Patent foramen ovale **and** implantable **cardioverter defibrillator**
Author(s): Broka SM (REPRINT) ; DeRoy LJ; Louagie YAG; Collard EL; Ducart

AR; Deheneffe YM; Joucken KL
Corporate Source: UNIV CLIN MONT GODINNE,UCL, DEPT ANAESTHESIOL/B-5530 YVOIR//BELGIUM/ (REPRINT)
Journal: ACTA CHIRURGICA BELGICA, 1999, V99, N3 (JUN), P132-134
ISSN: 0001-5458 Publication date: 19990600
Publisher: ASSOC SOC SCIENTIFIQUE MED BELGES, AVENUE CIRCULAIRE 138 A RINGLAAN, B-1180 BRUSSELS, BELGIUM
Language: English Document Type: ARTICLE
Geographic Location: BELGIUM
Subfile: CC CLIN--Current Contents, Clinical Medicine
Journal Subject Category: SURGERY
Abstract: A case of patent foramen ovale opening was observed concomitantly to a defibrillation threshold determination in the setting of an internal cardioverter defibrillator implantation. The subsequent transient right-to-left shunt was confirmed by a peroperative transoesophageal echocontrast study. The underlying mechanism of this incident may be related to a transient reversal of the interatrial gradient, due to the pre-existence of pulmonary hypertension and tricuspid regurgitation, associated with ongoing mechanical ventilation and modifications of intracardiac pressures regimen secondary to the succeeding ventricular tachyarrhythmia and defibrillation. Paradoxical embolism can be an aetiology for neurologic injury during internal cardioverter defibrillator implantation.
Descriptors--Author Keywords: **implantable** cardioverter defibrillator, cardiac pacing ; **foramen ovale** ; inter-atrial shunts ; paradoxical embolism ; stroke ; transoesophageal echocardiography
Identifiers--KeyWord Plus(R): TRANSESOPHAGEAL ECHOCARDIOGRAPHY
Cited References:

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MOORE SL, 1991, V14, P1865, PACE
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21/5/26 (Item 5 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

02826015 Genuine Article#: MF835 Number of References: 26
Title: MECHANISMS OF INCOMPLETE CARDIOPLEGIA DISTRIBUTION DURING CORONARY-ARTERY SURGERY - AN INTRAOPERATIVE TRANSESOPHAGEAL CONTRAST ECHOCARDIOGRAPHY STUDY
Author(s): VOCI P; BILOTTA F; CARETTA Q; CHIAROTTI F; MERCANTI C; MARINO B
Corporate Source: VIA S GIOVANNI EUDES 27/I-00163 ROME//ITALY/; UNIV FLORENCE/I-50121 FLORENCE//ITALY/; UNIV ROMA LA SAPIENZA,DEPT CARDIAC SURG/I-00185ROME//ITALY/; UNIV ROMA LA SAPIENZA,DEPT CARDIAC SURG & CARDIOL/I-00185 ROME//ITALY/
Journal: ANESTHESIOLOGY, 1993, V79, N5 (NOV), P904-912
ISSN: 0003-3022
Language: ENGLISH Document Type: ARTICLE
Geographic Location: ITALY
Subfile: SciSearch; CC LIFE--Current Contents, Life Sciences; CC CLIN--Current Contents, Clinical Medicine
Journal Subject Category: ANESTHESIOLOGY
Abstract: Background. Cardioplegia is used to protect the myocardium from ischemic injury during open-heart surgery. However, the delivery of cardioplegic solutions may be impaired by anatomic and/or functional

conditions, such as the development of transient aortic regurgitation during antegrade **administration** of cardioplegia or **shunting** through a **foramen ovale** during retrograde administration. In this study, the authors used a new method of cardioplegia administration, based on intraoperative contrast echocardiography, to detect on-line causes of inadequate cardioplegia delivery.

Methods: Forty patients with coronary artery disease and a competent aortic valve, who were treated consecutively, were enrolled in this study. Patients were monitored intraoperatively by transesophageal contrast echocardiography during cardioplegia delivery. Antegrade cardioplegia was administered into the aortic root following aortic occlusion in all patients. Twenty-two patients also received retrograde cardioplegia, administered through the right atrium. The echocontrast agent consisted of a stable suspension of 5% human albumin microbubbles with a concentration of 4. 10(8) microbubbles/ml and a diameter of 4 +/- 1 mu.

Results: Antegrade cardioplegia was not associated with aortic regurgitation in 23 of 40 (58%) patients. Seven patients (17%) had only mild aortic regurgitation, four patients (10%) had moderate regurgitation, and six (15%) had severe aortic regurgitation. The percent of myocardial opacification was 76.0 +/- 10.5 in the 23 patients who did not have aortic regurgitation, 76.0 +/- 17.0 in the 7 patients who had mild regurgitation, 52.5 +/- 18.1 in the 4 patients who had moderate regurgitation, and 48.5 +/- 18.3 in 6 patients who had severe aortic regurgitation (Kruskal-Wallis stat, 12.9; $P < 0.005$). Retrograde cardioplegia was not associated with right-to-left shunt in 11 of 22 patients (50%). In seven patients (32%), there was only a mild passage of contrast material to the left atrium. In the remaining four patients (18%), there was a moderate (one patient) to severe (three patients) right-to-left shunt at the level of the fossa ovalis.

Conclusions: This study shows that incomplete myocardial distribution of cardioplegia, secondary to transient aortic valve incompetence or shunting through the foramen ovale, is not uncommon in patients undergoing coronary surgery.

Descriptors--Author Keywords: HEART, CARDIOPLEGIA ; MEASUREMENT TECHNIQUE, CONTRAST ECHOCARDIOGRAPHY
Identifiers--KeyWords Plus: POTASSIUM-INDUCED CARDIOPLEGIA; REGIONAL MYOCARDIAL PERFUSION; RETROGRADE CARDIOPLEGIA; BLOOD; DISEASE
Research Fronts: 91-5384 002 (CONTRAST ECHOCARDIOGRAPHY; SONICATED ALBUMIN MICROSPHERES; HIGH-SPEED ULTRASOUND VOLUMETRIC IMAGING-SYSTEM)
91-3468 001 (INTERNAL MAMMARY ARTERY; AORTOCORONARY BYPASS GRAFTS; REPORT OF THE AMERICAN-COLLEGE-OF-CARDIOLOGY AMERICAN-HEART-ASSOCIATION TASK-FORCE)

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VOCI P, 1992, V13, P1146, EUR HEART J
VOCI P, 1990, P255, PULSED COLD SONICATI

21/5/30 (Item 1 from file: 73)

11377851 EMBASE No: 2001392109

Transcatheter closure of subaortic ventricular septal defect (VSD) using a nickel-titanium spiral coil (NitOcclud): Animal study and initial clinical results

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Progress in Pediatric Cardiology (PROG. PEDIATR. CARDIOL.) (Ireland) 2001, 14/1 (83-88)
CODEN: PPCAF ISSN: 1058-9813
PUBLISHER ITEM IDENTIFIER: S1058981301001230
DOCUMENT TYPE: Journal ; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 10

Transcatheter closure of VSD has been successful in defects of the muscular septum distant from the aortic and mitral valve apparatus. Attempts to close subaortic VSDs have been largely unsuccessful because of device-related aortic insufficiency. The NitOcclud device is a Nitinol spiral coil device which has been evaluated in animals with subaortic VSD. Results of the animal study are promising, and the device has also been implanted in a few humans. This paper describes the device, the **implant** technique in subaortic **VSD** , and the results of animal and human implants.

DEVICE BRAND NAME/MANUFACTURER NAME: NitOcclud/PFM/Germany
DEVICE MANUFACTURER NAMES: PFM/Germany
DRUG DESCRIPTORS:
*nickel; *titanium
MEDICAL DESCRIPTORS:
*heart ventricle septum defect--diagnosis--di; *heart ventricle septum defect--surgery--su; *heart catheterization
surgical instrument; device; treatment outcome; aorta valve regurgitation --complication--co; implantation; surgical technique; hemodynamic monitoring; angiography; histopathology; follow up; human; nonhuman; case report; clinical trial; animal experiment; animal model; controlled study; adult; article; priority journal
CAS REGISTRY NO.: 7440-02-0 (nickel); 7440-32-6 (titanium)
SECTION HEADINGS:
018 Cardiovascular Diseases and Cardiovascular Surgery
027 Biophysics, Bioengineering and Medical Instrumentation

21/5/31 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

11198169 EMBASE No: 2001211001
Occlusion of interatrial communications with the Amplatzer device: Experience in 48 consecutive patients
Brockmeier K.; Schmidt K.G.; Ulmer H.E.; Gorenflo M.
Dr. K. Brockmeier, Department of Pediatric Cardiology, Children's University Hospital, INF 153, 69120 Heidelberg Germany
AUTHOR EMAIL: konradbrockmeier@med.uni-heidelberg.de
Journal of Interventional Cardiology (J. INTERVENT. CARDIOL.) (United States) 2001, 14/3 (325-328)
CODEN: JICAF ISSN: 0896-4327
DOCUMENT TYPE: Journal ; Conference Paper
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 27

Both secundum atrial septal defect (ASD) and patent foramen ovale (PFO) have been closed interventionally using several different occluding devices. At a single institution we strived for interventional occlusion of interatrial communications using the Amplatzer device exclusively. During a study period of 22 months, we studied 48 patients ranging in age from 1 to 48 years with an ASD (n = 45) or a **PFO** (n = 3). Successful **implantation** of an Amplatzer device was possible in 92% of the patients, and 95% of these patients had a complete early closure of their defect. There were no complications related to the procedure. We conclude that interventional closure of interatrial communications with the Amplatzer device is feasible and safe for selected patients.

DEVICE BRAND NAME/MANUFACTURER NAME: Amplatzaer/Aga/United States
DEVICE MANUFACTURER NAMES: Aga/United States
MEDICAL DESCRIPTORS:
*heart atrium septum defect--surgery--su
implant; treatment outcome; transthoracic echocardiography; safety; human; male; female; clinical article; adolescent; child; adult; conference paper; priority journal
SECTION HEADINGS:
018 Cardiovascular Diseases and Cardiovascular Surgery
027 Biophysics, Bioengineering and Medical Instrumentation

21/5/32 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE

11198166 EMBASE No: 2001210998
Experimental preseeding of the STARFlex atrial septal occluder device with autologous cells
Jux C.; Bertram H.; Wohlsein P.; Bruegmann M.; Fink C.; Wueboldt P.; Paul T.; Hausdorf G.
Dr. C. Jux, DPCPICM, Hannover Medical School, Carl Neuberg Strasse 1, D-30625 Hannover Germany
Journal of Interventional Cardiology (J. INTERVENT. CARDIOL.) (United States) 2001, 14/3 (309-312)
CODEN: JICAF ISSN: 0896-4327
DOCUMENT TYPE: Journal ; Conference Paper
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 7

Devices used in interventional cardiology are permanent implants. However, most of the devices fulfill only a temporary function. For example, atrial septal defect (ASD) occluders serve as mechanical shields until complete in- and overgrowth of the occluding device by endogenous tissue from the defect edges has occurred. Thereafter, the foreign body material of the devices is no longer needed and bears potential long-term adverse effects. The concept of "biodegradable"occluder devices that act as transient mechanical shields to close the defects and as scaffolds for overgrowth with autologous tissue is, therefore, tempting. Since rapid and complete ingrowth as well as coverage by firm tissue is a prerequisite for any such "biological" occluder devices, the feasibility and short-term in vivo response to STARFlex devices preseeded with autologous cells was studied in an experimental sheep model. The experiments demonstrated that autologous cell preseeding of cardiovascular implants is technically feasible. Cells survived the mechanical stress of device implantation. A precoating of conventional STARFlex occluders led to an increased cellular density after cell seeding of the device, an increased resistance of the precultured cytolayer against mechanical stress, and a significantly higher poststress viability of " **implanted** " cells. Experimental closure of **ASD** using autologous-cell preseeded STARFlex devices was uncomplicated. In the sheep model this led to rapid, complete, and firm ingrowth of the device into the adjacent atrial tissue. A thicker layer of young fibrous granulation tissue in organization was found on the preseeded devices compared with the unseeded control group after 4 weeks in vivo. Currently, an increased thrombogenicity limits in vivo application.

DEVICE BRAND NAME/MANUFACTURER NAME: STARflex/NMT/United States
DEVICE MANUFACTURER NAMES: NMT/United States
MEDICAL DESCRIPTORS:
*heart atrium septum defect--surgery--su; *implant
tissue growth; sheep; cell survival; mechanical stress; granulation tissue; thrombogenicity; nonhuman; animal model; conference paper; priority journal
SECTION HEADINGS:
018 Cardiovascular Diseases and Cardiovascular Surgery
027 Biophysics, Bioengineering and Medical Instrumentation

21/5/33 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE

11154092 EMBASE No: 2001168876
Transcatheter closure of secundum atrial septal defect with a new self-expanding nitinol double disk device (amplatzer device): Experience in Nanjing
Kong X.; Cao K.; Xu D.; Chen M.; Yang R.; Huang J.
Dr. X. Kong, Department of Cardiology, First Affiliated Hospital Med. Univ., Guangzhou Road 300, 210029 Nanjing China
AUTHOR EMAIL: xqkong@publicl.ptt.js.cn
Journal of Interventional Cardiology (J. INTERVENT. CARDIOL.) (United States) 2001, 14/2 (193-196)
CODEN: JICAF ISSN: 0896-4327
DOCUMENT TYPE: Journal ; Conference Paper
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 10

Purpose: Various devices have been developed for the transcatheter closure of secundum atrial septal defect (ASD II) to avoid the morbidity, discomfort, and thoracotomy scar associated with surgical closure. The purpose of this study was to evaluate the safety and efficacy of the Amplatzer septal occluder for transcatheter closure of ASD II. Patients and

Methods: Only patients who were clinically diagnosed with ASD II were selected. The anatomy of ASD had to meet certain echocardiographic criteria. Under the guidance of echocardiography and fluoroscopy, the implantation of the device was accomplished as recommended by the manufacturer. Results: Thirty patients (median age 18.4 years) with an ASD II underwent transcatheter closure. Procedure time ranged from 30-200 minutes and fluoroscopy time from 10-50 minutes. The diameter of the ASD measured by echocardiography ranged from 13-25 mm, while both the stretched diameters of the ASDs and the sizes of the devices ranged from 18-34 mm. The successful placement rate was 100%. The residual shunt rate was 100% immediately after device implantation and 10% after 24 hours. After 3 months, 3.3% of the patients had a (trivial) residual shunt. The device did not affect the surrounding structures of ASD. No embolization of the device occurred. Conclusion. The Amplatzer device designed for the closure of **ASD** II can be **implanted** easily and also is retrievable. Due to a low ratio of residual shunt and few complications, this device is a good choice for transcatheter closure of ASD II. Long-term follow-up will be required for widespread clinical use.

DEVICE BRAND NAME/MANUFACTURER NAME: Amplatzer/Aga/United States
DEVICE MANUFACTURER NAMES: Aga/United States
MEDICAL DESCRIPTORS:
*heart atrium septum defect--diagnosis--di; *heart atrium septum defect --surgery--su
catheter; device; morbidity; thoracotomy; disease association; safety; echocardiography; fluoroscopy; artificial embolism; human; clinical article ; controlled study; adolescent; aged; child; adult; conference paper; priority journal
SECTION HEADINGS:
006 Internal Medicine
018 Cardiovascular Diseases and Cardiovascular Surgery
027 Biophysics, Bioengineering and Medical Instrumentation

21/5/34 (Item 5 from file: 73)
DIALOG(R)File 73:EMBASE

11153832 EMBASE No: 2001168589
Percutaneous closure of patent foramen ovale in symptomatic patients
Wahl A.; Windecker S.; Eberli F.R.; Seiler C.; Meier B.
Dr. S. Windecker, Interventional Cardiology, Swiss Cardiovascular Center Bern, University Hospital, CH-3010 Bern Switzerland
AUTHOR EMAIL: stephan.windecker@insel.ch
Journal of Interventional Cardiology (J. INTERVENT. CARDIOL.) (United States) 2001, 14/2 (203-209)
CODEN: JICAF ISSN: 0896-4327
DOCUMENT TYPE: Journal ; Conference Paper
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 29

Background: Patent foramen ovale (PFO) and atrial septal aneurysm (ASA) have been associated with stroke in young adults. Patients with PFO suffering from paradoxical embolism are at increased risk for recurrent events. Percutaneous PFO closure is a new treatment modality aimed at secondary prevention. Methods and Results: Since April 1994, 132 consecutive patients, aged 51 +/- 12 years with PFO and with at least one paradoxical embolic event, underwent percutaneous PFO closure using six different device types. The embolic index event was an ischemic stroke in 62% of patients, a transient ischemic attack (T1A) in 33% of patients, and a peripheral embolism in 5% of patients. Thirty-six (27%) patients had PFO

associated with ASA, whereas 96 (73%) patients had **PFO** only. The **implantation** procedure was successful in 130 (98%) patients. During and up to 6 years of follow-up (mean 1.8 +/- 1.6 years, 231 patient years), a total of eight recurrent embolic events were observed, with six T1As, two peripheral emboli, and no ischemic stroke. The actuarial freedom from recurrence of the combined end point of TIA, ischemic stroke, and peripheral embolism was 95.3% (95% confidence interval [CI], 91.0%-96.4%) at 1 year and 90.5% (95% CI, 83.6%-97.2%) at 6 years. Conclusions: Percutaneous PFO closure can be performed with a high success rate. The procedure appears a promising therapeutic modality for secondary prevention of recurrent embolism in patients with PFO. Randomized trials must define its therapeutic value.

MEDICAL DESCRIPTORS:
*heart atrium septum defect--surgery--su
disease association; stroke--complication--co; embolism--complication--co; risk factor; recurrent disease; secondary prevention; device; cerebrovascular accident--complication--co; transient ischemic attack --complication--co; follow up; treatment outcome; treatment planning; human ; male; female; major clinical study; controlled study; aged; adult; conference paper; priority journal
SECTION HEADINGS:
006 Internal Medicine
008 Neurology and Neurosurgery
018 Cardiovascular Diseases and Cardiovascular Surgery

21/5/35 (Item 6 from file: 73)
DIALOG(R)File 73:EMBASE

11086018 EMBASE No: 2001101848
Catheter closure of atrial septal defects and patent foramen ovale in patients with an atrial septal aneurysm using different devices
Krumsdorf U.; Keppeler P.; Horvath K.; Zadan E.; Schrader R.; Sievert H.
Dr. H. Sievert, Cardiovascular Center Bethanien, Im Prufling 23, 60389 Frankfurt Germany
AUTHOR EMAIL: horst.sievert@dgn.de
Journal of Interventional Cardiology (J. INTERVENT. CARDIOL.) (United States) 2001, 14/1 (49-55)
CODEN: JICAF ISSN: 0896-4327
DOCUMENT TYPE: Journal ; Conference Paper
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 31

Background: Atrial septal aneurysm is frequently associated with patent foramen ovale (PFO) and atrial septal defects (ASD). Moreover, a relationship between atrial septal aneurysm and embolic cerebrovascular events has been suggested. The aims of this study were to analyze morphological and functional characteristics of atrial septal aneurysm in PFO and ASD patients and to assess the feasibility and efficacy of different devices for transcatheter closure and the influence of atrial septal aneurysm. Methods: Between March 1997 and May 2000 transcatheter ASD or PFO closure was attempted in 63 patients (mean age 47 +/- 13 years) with an atrial septal aneurysm using one of the following devices: Angelwings (n = 3), Cardioseal (n = 5), Cardioseal-Starflex (n = 7), Amplatzer (n = 11), Amplatzer-PFO (n = 5), PFO-Star (n = 25), or Helex (n = 7). Results: Implantation was primarily successful (after the first or second attempt) in all patients. One PFO-Star device embolized 12 hours after the procedure. During follow-up (0.6-37 months, mean 10.4 +/- 9.2) a residual shunt could be detected by transesophageal echocardiography after 2 weeks

in four patients and after 6 months in one patient. Three **PFO** patients had cerebrovascular events after **implantation** . Two patients had a transient ischemic attack (TIA) and one patient a stroke. A thrombus formation on the device detected in three patients disappeared after antithrombotic therapy. Conclusion: We conclude that ASDs and PFOs with an associated atrial septal aneurysm can be closed with different available devices. There seem to be no additional risks compared with patients without atrial septal aneurysm.

MEDICAL DESCRIPTORS:
*heart atrium septum defect--surgery--su; *aneurysm--surgery--su
heart catheterization; wound closure; transthoracic echocardiography; device; transient ischemic attack; autopsy; artificial embolism; thrombogenesis; human; male; female; clinical article; aged; adult; conference paper; priority journal
SECTION HEADINGS:
018 Cardiovascular Diseases and Cardiovascular Surgery

21/5/36 (Item 7 from file: 73)
DIALOG(R)File 73:EMBASE

07422176 EMBASE No: 1998329582
Transcatheter closure of atrial septal defects with the Amplatzer device: Preliminary results
PRZEZNACKYNIOWE ZAMYKANIE UBYTKOW PRZEGRODY MIEDZYPRZEDSIONKOWEJ METODA IMPLANTACJI 'AMPLATZER SEPTAL OCCLUDER'. DOSWIADCZENIA WSTEPNE
Szkutnik M.; Bialkowski J.; Gavora P.; Masura J.; Kukulski T.; Frycz M.; Banaszak P.; Kreis W.
M. Szkutnik, Klinika Kardiologii Dzieci, Slaskie Centrum Chorob Serca, ul. Szpitalna 2, 41-800 Zabrze Poland
Kardiologia Polska (KARDIOL. POL.) (Poland) 1998, 48/9 (216-221)
CODEN: KARPA ISSN: 0022-9032
DOCUMENT TYPE: Journal; Article
LANGUAGE: POLISH SUMMARY LANGUAGE: ENGLISH; POLISH
NUMBER OF REFERENCES: 14

BACKGROUND: Recently, non-operative closure during cardiac catheterisation of the secundum atrial septal defect (ASD) has become an attractive alternative to surgical treatment. Various devices have been tested, however, a long-term efficacy and safety of some of these methods have been questioned. AIM: To assess safety and efficacy of transcatheter closure of ASD using the Amplatzer device. METHODS: Twelve patients (mean age 18 years, range from 4 to 42 years; mean body weight 48 kg, range from 17 to 60 kg) with **ASD** underwent **implantation** of the newly developed one-piece nitinol device through a long transseptal sheath. The procedure was performed under fluoroscopic and transesophageal echocardiographic guidance. The size of implanted devices, chosen according to the size of the stretch diameter of ASD, ranged from 13 to 24 mm (mean 18 mm) RESULTS: Complete immediate closure of the defect was achieved in 9 patients, and in another 2 patients - during 24 hours following the procedure. There was only one trivial residual shunt detected by the Color-Doppler echocardiography. There were no complications except one patient in whom blood transfusion was necessary. CONCLUSIONS: Our initial experience shows that transvenous closure of ASD with the Amplatzer device is safe, easy, and effective. The procedure should be considered as a treatment of choice in selected patients.

DEVICE BRAND NAME/MANUFACTURER NAME: Amplatzer Septal Occluder
MEDICAL DESCRIPTORS:

*heart atrium septum defect--surgery--su
open heart surgery; surgical technique; surgical instrument; heart catheterization; surgical approach; color ultrasound flowmetry; transesophageal echocardiography; safety; treatment outcome; human; clinical article; adolescent; child; adult; article
SECTION HEADINGS:
018 Cardiovascular Diseases and Cardiovascular Surgery

21/5/38 (Item 9 from file: 73)
DIALOG(R)File 73:EMBASE

06484078 EMBASE No: 1996149334
Clinical impact of transcatheter closure of secundum atrial septal defects with the double umbrella device
Justo R.N.; Nykanen D.G.; Boutin C.; McCrindle B.W.; Freedom R.M.; Benson L.N.
Division of Pediatric Cardiology, Hospital for Sick Children, 555 University Avenue,Toronto, Ont. M5G 1X8 Canada
American Journal of Cardiology (AM. J. CARDIOL.) (United States) 1996, 77/10 (889-892)
CODEN: AJCDA ISSN: 0002-9149
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

The clinical impact of transcatheter closure of the isolated secundum atrial septal defect was reviewed. Closure by echocardiographic evaluation was 23 +/- 14% at 6 months, 49 +/- 16% at 2 years, and 64 +/- 16% at 4 years, and right ventricular end-diastolic dimensions in patients without residual shunts did not differ significantly from those with residual shunts.

MEDICAL DESCRIPTORS:
*heart atrium septum defect--surgery--su; *heart catheterization article; artificial embolism--complication--co; clinical article; echocardiography; heart **foramen ovale** ; heart right ventricle; hemodynamics; human; **implantation** ; patient selection; preschool child; priority journal; shunting
SECTION HEADINGS:
018 Cardiovascular Diseases and Cardiovascular Surgery

21/5/39 (Item 10 from file: 73)
DIALOG(R)File 73:EMBASE

05552112 EMBASE No: 1993320212
Interventional catheter procedures used in congenital heart disease
Landzberg M.J.; Lock J.E.
Boston Adult Congenital Heart Svc., Children's Hospital, 75 Francis Street,Boston, MA 02115 United States
Cardiology Clinics (CARDIOL. CLIN.) (United States) 1993, 11/4 (569-587)
CODEN: CACLE ISSN: 0733-8651
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Many of the transcatheter devices described in this article remain investigational in the United States. Currently, we consider the applications of these techniques as either (1) procedures of choice (for

closures of patent ductus arteriosus, balloon dilation or stert implantation for peripheral pulmonary stenoses, balloon dilation of recurrent or persistent aortic coarctation, balloon pulmonary valvotomy, closure of congenital muscular or postoperative residual ventricular septal defects, closure of patent foramen ovale in the setting of cyanosis, balloon aortic valvotomy, fenestration closures, coil embolization of thoracic collateral vessels); (2) effective alternatives to surgical therapy (closures of atrial septal defects of the secundum type, balloon dilation of native aortic coarctation, stent implantation for conduit or baffle obstruction, device embolization of paravalvular leaks or coronary artery fistulas); or (3) treatments with unproven effect (closure of acute postmyocardial infarction ventricular septal defects, closure of **patent foramen ovale** for idiopathic stroke, **stent implantation** for pulmonary venous stenosis) (Table 1). Patients with congenital heart disease often undergo multiple catheterizations and surgical therapies, each with its own complications and sequelae. Clinical trials of catheter-based technologies for patients with congenital heart disease have consisted of uncontrolled case series with a lack of standardized follow-up. Additional prospective large-scale clinical trials of these therapies seem necessary before their widespread acceptance.

MEDICAL DESCRIPTORS:
*congenital heart disease--congenital disorder--cn; *congenital heart disease--therapy--th
aorta coarctation--therapy--th; aorta coarctation--congenital disorder--cn; aorta valve stenosis--congenital disorder--cn; aorta valve stenosis --therapy--th; article; artificial embolism; heart atrium septum defect --therapy--th; heart atrium septum defect--congenital disorder--cn; heart catheterization; heart ventricle septum defect--congenital disorder--cn; heart ventricle septum defect--therapy--th; human; patent ductus arteriosus --therapy--th; patent ductus arteriosus--congenital disorder--cn; percutaneous transluminal angioplasty; pulmonary artery stenosis --congenital disorder--cn; pulmonary artery stenosis--therapy--th
SECTION HEADINGS:
018 Cardiovascular Diseases and Cardiovascular Surgery

21/5/43 (Item 14 from file: 73)
DIALOG(R)File 73:EMBASE

01989172 EMBASE No: 1981040340
Multi-cavity myxomas. Report of one case of bi-atrial myxoma and review of the literature
LES MYXOMES MULTI-CAVITAIRES. REVUE DE LA LITTERATURE A PROPOS D'UN CAS DE MYXOME BI-AURICULAIRE
Herpin D.; Boutaud Ph.; Champeau C.; et al.
Serv. Cardiol. B, CHU La Miletrie, 86021 Poitiers France
Annales de Cardiologie et d'Angeiologie (ANN. CARDIOL. ANGEIOL.) (France) 1980, 29/7 (531-540)
CODEN: ACAAB
DOCUMENT TYPE: Journal
LANGUAGE: FRENCH SUMMARY LANGUAGE: ENGLISH

The authors report a case of bi-atrial myxoma the diagnosis of which had been suspected before operation. TM echocardiography only identified the left atrial mass, and missed the right atrial mass, which had not prolapsed; angiography showed easily a left atrial filling defect, whereas the right myxoma had only given a very discreet shadow. The surgeon removed two pediculated tumours which were **implanted** opposite one another on the **fossa ovalis** . The course was marked by the persistency of marked

pulmonary hypertension, due to the onset before operation of multiple pulmonary embolisms confirmed by a lung scan. A study of the literature permitted us to find 14 other published cases of bi-atrial tumour of a myxomatous nature; the authors also became interested in cases of mono-atrial myxoma passing into the opposite atrium through the foramen ovale: there were 4 published cases, together with multi-cavity, non-bi-auricular myxomas. They discuss the main semiological characteristics and their course, and emphasise the interest of a routine family study.

MEDICAL DESCRIPTORS:
*heart left atrium; *heart myxoma; *heart right atrium; *heart surgery
heart; diagnosis; case report; therapy
SECTION HEADINGS:
018 Cardiovascular Diseases and Cardiovascular Surgery
005 General Pathology and Pathological Anatomy
009 Surgery

21/5/45 (Item 16 from file: 73)
DIALOG(R)File 73:EMBASE

00948654 EMBASE No: 1978076963
The prognosis in Ebstein's disease of the heart. Long term follow up of 22 patients
Hansen J.F.; Leth A.; Dorph S.; Wennevold A.
Med. Dept. B., Rigshosp., Copenhagen
Acta Medica Scandinavica (ACTA MED. SCAND.) (Sweden) 1977, 201/4 (331-335)
CODEN: AMSVA
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

A follow up study of 22 patients with Ebstein's anomaly has been performed. Nine patients 1 to 21 years (mean 9) after the initial admission while the 13 patients alive at the end of the observation period had been followed for 5 to 26 years (mean 15). Clinical, ECG, radiological, and haemodynamic features were analyzed with reference to their prognostic significance. The presence or absence of cyanosis due to right to left shunt through an atrial septal defect (ASD) distinguished best between a good and a poor prognosis. Right sided heart failure and dyspnoea at rest, often associated with palpitations, precordial pains and syncopes, were grave prognostic findings. After the initial signs of heart failure there was a rapid deterioration, death ensuing within a few years. Operation with **insertion** of a **prosthetic** valve (and closure of the **ASD**) should be seriously considered at the appearance of heart failure.

MEDICAL DESCRIPTORS:
*prognosis
major clinical study
MEDICAL TERMS (UNCONTROLLED): ebstein disease
SECTION HEADINGS:
018 Cardiovascular Diseases and Cardiovascular Surgery
007 Pediatrics and Pediatric Surgery

21/5/46 (Item 17 from file: 73)
DIALOG(R)File 73:EMBASE

00206967 EMBASE No: 1974197123
Nonoperative closure of atrial septal defects
King T.D.; Mills N.L.
Dept. Ped., Sect. Ped. Cardiol., Ochsner Clin., New Orleans, La. 70121 United States
Surgery (SURGERY) 1974, 75/3 (383-388)
CODEN: SURGA
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

Atrial septal defects (ASD) were created in 13 adult dogs. An experimental technique and apparatus have been developed for transvenous closure of the defects. The procedure employs a pair of interlocking umbrella like components made of stainless steel and Dacron. The umbrellas are introduced and locked across the **ASD** 's through an outer **catheter introduced** through the femoral vein. The defects can be closed within 30 min using this procedure. Physiological closure was documented by repeat cardiac catheterization in the five animals in which the procedure was completed. Autopsy of these experimental animals proved complete anatomical closure of the ASD.
MEDICAL DESCRIPTORS:
*congenital heart malformation; *heart atrium septum defect; *heart catheterization
theoretical study; therapy; dog
SECTION HEADINGS:
018 Cardiovascular Diseases and Cardiovascular Surgery
009 Surgery

21/5/47 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal

15064340 PASCAL No.: 01-0223180
Kompletter thrombotischer Verschluss der deszendierenden Aorta Transvenoese interventionelle Therapie mit Ballonangioplastie
(Transvenous balloon angioplasty for relief of complete thrombotic occlusion of the descending aorta)
PEUSTER M; FINK C; JUX C; HAUSDORF G
Abteilung Paediatrische Kardiologie und Paediatrische Intensivmedizin, Zentrum fuer Kinderheilkunde und Humangenetik, Medizinische Hochschule Hannover, Germany
Journal: Monatsschrift fuer Kinderheilkunde, 2001, 149 (3) 296-299
ISSN: 0026-9298 CODEN: MOKIAY Availability: INIST-6331; 354000097574780110
No. of Refs.: 22 ref.
Document Type: P (Serial) ; A (Analytic)
Country of Publication: Germany
Language: German Summary Language: English
Case report. We report on a neonate born after 40 weeks of gestation who was transferred to our institution with suspected coarctation of the aorta. Echocardiography disclosed a thrombotic occlusion of the descending aorta distally to the renal arteries. Angiography and transcatheter balloon angioplasty were performed using an anterograde venous approach with passage of the catheter through the foramen ovale into the arterial system via a loop in the left ventricle. Blood flow accross the descending aorta was effectively restored.The left iliac artery, however,could not be recanalized interventionally due to long-standing thombotic occlusion. Since there was extensive collateral formation perfusion of the left lower extremity was not compromised. Follow-up with Duplex-sonography demonstrated complete patency of the descending aorta 12 months

postinterventionally. Discussion. In pediatric patients,transcatheter recanalization and balloon angioplasty of arterial thrombosis can be performed using a venous approach and should be considered as an alternative to fibrinolytic therapy.

English Descriptors: Thrombosis; Descending aorta; Occlusion; Plasty; Cuff; Intravenous **administration** ; **Foramen ovale** ; Revascularization; **Catheter** ; Treatment efficiency; Method; Case study; Newborn
Broad Descriptors: Human; Cardiovascular disease; Vascular disease; Aortic disease; Surgery; Homme; Appareil circulatoire pathologie; Vaisseau sanguin pathologie; Aorte pathologie; Chirurgie; Hombre; Aparato circulatorio patologia; Vaso sanguineo patologia; Aorta patologia; Cirugia

French Descriptors: Thrombose; Aorte descendante; Occlusion; Plastie; Ballonnet; Voie intraveineuse; Trou ovale; Revascularisation; Catheter; Efficacite traitement; Methode; Etude cas; Nouveau ne

Classification Codes: 002B12B02

21/5/48 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

13987894 PMID: 11761802
[Transcatheter closure of atrial septal defects in adults with the Amplatzer atrial septal occluder]
Przezcewnikowe zamykanie ubytku miedzyprzedsionkowego u doroslych za pomoca korka Amplatzer.
Bialkowski J; Szkutnik M; Wilczek K; Chodor B; Zeifert B; Sikora J; Szatkowski K; Haponiuk I; Zembala M
Oddzial Kliniczny Kardiologii Dzieciecej, Sl. Centrum Chorob Serca w Zabrzu.
Polskie archiwum medycyny wewnetrznej (Poland) Apr 2001, 105 (4) p303-9, ISSN 0032-3772 Journal Code: 0401225
Publishing Model Print
Document type: Journal Article ; English Abstract
Languages: POLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Subfile: INDEX MEDICUS
In many centres the Amplatzer Septal Occluder (ASO) (AGA Med. Corp. Minnesota, USA) has become the device of choice for secundum atrial septal defect (ASD) closure in children. Current trend towards transcatheter closure of ASD in children could be translated to adults and many patients (pts) may avoid the need of open heart surgery. Assessment the efficacy and complication of device occlusion of ASD in adults, using ASO. Between October 1997 and April 2001 transcatheter closure of ASD was attempted in 51 pts who fulfilled the inclusion criteria--significant shunt with sufficient rims of interatrial septum. Mean age of pts was 29 (16-63) y, mean ASD diameter assessed by transesophageal echocardiography (TEE) was 14.7 (7-24) mm, assessed during catheterization by balloon sizing (stretched diameter) was 20.2 (8-36) mm. There were 9 pts with multiple ASDs, 2 pts with aneurysm of interatrial septum and 2--after previous surgery (recanalization of **ASD**). The ASO devices were successfully **implanted** in all, but one pt. In one patient because of unstable position of ASO (floppy rims), device was removed and bigger one was applied during

next session. In one case early embolization to abdominal aorta occurred, ASO was translocated to aortic arch with Dotter basket and removed from aorta during simultaneous surgical closure of ASD. Mean fluoroscopy time was 15 (4-50) min. The occlusion rate after 24 h was 90%, after 1 month (m) 92%, after 3 m 93.5%, after 1 year (y) 93.3% and after 2 y 93.3%. All residual shunts were trivial. There were no late complication. CONCLUSIONS: The excellent results of ASD closure with ASO in adults indicate this treatment as a method of choice in selected patients, but long term follow-up is necessary to state final judgement.

Tags: Female; Male

Descriptors: *Embolization, Therapeutic--methods--MT; *Heart Septal Defects, Atrial--therapy--TH; Adolescent; Adult; Humans; Middle Aged

Record Date Created: 20011213

Record Date Completed: 20020221

21/5/49 (Item 2 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

13782866 PMID: 11446028

[Multiple paradoxical emboli in patent foramen ovale]

Multiple paradoxe Embolien bei offenem Foramen ovale.

Knobloch W; Schlesinger A; Jacksch R

Klinik fur Kardiologie, St. Vincenz-Krankenhaus, Essen. knofreq@nexgo.de

Deutsche medizinische Wochenschrift (Germany) Jun 15 2001, 126 (24) p717-21, ISSN 0012-0472 Journal Code: 0006723

Publishing Model Print

Document type: Case Reports; Journal Article ; English Abstract

Languages: GERMAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

HISTORY AND CLINICAL FINDINGS: A 38-year-old man was admitted because of angina pectoris with concomitant dyspnoea. Three months previously he had suffered an ischaemic stroke of the right middle cerebral artery and was treated in a neurological department. At that time, no aetiologic diagnosis was possible. There was no history of other diseases. Pulse rate was 100 beats per minute with a blood pressure of 140/60 mm Hg. The left calf had a 4 cm greater circumference without any symptoms. The rest of the physical examination in the markedly overweight patient was normal. INVESTIGATIONS: The ECG showed sinus rhythm and negative T-waves in leads V1-V4 and a slightly elevated ST-segments in II, III and aVF. An acute coronary thrombosis was ruled out by left heart catheter-angio. DIAGNOSIS, TREATMENT AND COURSE: Within the following hours, embolic occlusion of the left popliteal artery developed and was treated with a Fogarty catheter. On the first postoperative day, the patient complained about mild dysaesthesia of his right arm. Duplex sonography showed a floating thrombus in the left carotid bifurcation. The thrombus was removed surgically. Later a pulmonary embolism due to deep vein thrombosis in the left thigh and calf was found. Transoesophageal echocardiography performed in another hospital previously was repeated and a patent foramen ovale (PFO) with a middle-sized shunt was found. The **patent foramen ovale** was closed percutaneously by **implanting** a Cardioseal-Starflex occluder. There was neither a complication nor a residual shunt. Neurological symptoms disappeared completely within the next few months. The patient has now been free from new neurological events for 11 months. CONCLUSION: In patients with PFO, paradoxical embolism remains a challenging diagnosis that can be made highly probable by documentation of venous thromboses, pulmonary embolism, missing evidence of atherosclerosis in the vessels of the embolized organ and exclusion of other cardiovascular sources of emboli and prothrombotic

coagulation disorders. Interventional closure of a patent foramen ovale appears to be the treatment of choice in proven paradoxical embolism.

Tags: Male

Descriptors: *Carotid Arteries; *Embolism, Paradoxical--etiology--ET; *Heart Septal Defects, Atrial--complications--CO; *Popliteal Artery; *Pulmonary Embolism--etiology--ET; Adult; Balloon Dilatation; Embolism, Paradoxical--diagnosis--DI; Embolism, Paradoxical--therapy--TH; Heart Septal Defects, Atrial--diagnosis--DI; Heart Septal Defects, Atrial --surgery--SU; Humans; Pulmonary Embolism--diagnosis--DI; Pulmonary Embolism--surgery--SU; Venous Thrombosis--complications--CO

Record Date Created: 20010711

Record Date Completed: 20010712

?

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Set     Items   Description
S1     650804   CATHETER? OR TUBE? ? OR TUBING OR TUBULAR OR CANNULA? OR C-
             ANULA? OR STENT? OR PIPE OR PIPING OR INTUBAT? OR PROSTHE? OR
             SHUNT? OR BYPASS??? OR BY()PASS?? OR INDWELL??? OR  IMPLANT? -
             OR ELONGAT?(3N)(BODY OR BODIES OR MEMBER?)
S2     677349   HEART? OR CORONAR? OR VENTRIC? OR ATRIA? ? OR ATRIUM? ? OR
             INTERVENTRIC? OR ARTIOVENTRIC? OR INTERATRIA? OR ATRIORUM()CO-
             RDIS OR MYOCARDIA?
S3      24190   MYOCARDI???? OR PERICARDI???? OR EPICARDI???? OR ENDOCARDI-
             ????
S4     804766   INTERSTITIAL? OR INTER()STITIAL? OR MEMBRANE? OR WALL? ? OR
              SEPTAL? OR SEPTUM? OR SEPTA
S5    3630552   OPENING? OR PASSAG? OR HOLE? ? OR WINDOW? OR OUTLET? OR IN-
             LET? OR CHANNEL?
S6       5119   OVAL??(N)(FOSSA? ?) OR (PATENT? ? OR OVALE? ?)(N) FORAMEN?
             OR PFO OR ASD OR VSD
S7    7046470   INSERT? OR ENTER??? OR IMPLANT? OR INTERJECT? OR INTRODUC?
             OR ADMINIST? OR ADMIT???? OR ADMISSION
S8    3593554   PY=2004:2005
S9    4393516   PY=2002:2003
S10      3294   S2(3N)S4
S11       438   (S3 OR S10)(5N)S5
S12     99016   S1 (5N)S7
S13        87   S11 AND S12
S14        61   S13 NOT S8:S9
S15        34   RD (unique items)
S16      3334   S2:S3(3N)S4
S17       246   S16(5N)S5
S18        27   S17 (S) S12
S19         0   S18 NOT S13
S20       102   S11 (S) S1
S21        51   S20 NOT S13
S22        49   S21 NOT S8:S9
S23        24   RD (unique items)
S24   7092149   PRE()EXIST??? OR PREEXIST??? OR PREVIOUS? OR PRIOR? OR PRE-
             CED? OR ANTECED? OR FORERUN? OR BEFORE OR EARLIER
S25   5781297   EXIST??? OR PRESENT? OR OCCUR? OR HAPPEN?
S26   4110953   NATURAL? OR UNARTIFICIAL? OR NONARTIFICIAL? OR INARTIFICIA-
             L? OR ARTIFICIAL? OR REAL
S27       241   S16 (10N) S24:S26
S28        25   S27 (S) S12
S29        19   S28 NOT S8:S9
S30        10   RD (unique items)
S31        89   S6 (10N) S12
S32        79   S31 NOT (S13 OR S21 OR S28)
S33         9   S32 NOT S8:S9
S34         5   RD (unique items)
S35       212   CARDIOSEAL?
S36       140   S35 (S) (S2 OR S6)
S37        87   S36 NOT (S13 OR S21 OR S28 OR S34 OR S8:S9)
S38        45   RD (unique items)
? show files
File  16:Gale Group PROMT(R) 1990-2005/Jun 29
         (c) 2005 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 148:Gale Group Trade & Industry DB 1976-2005/Jun 29
         (c)2005 The Gale Group
File 621:Gale Group New Prod.Annou.(R) 1985-2005/Jun 29
         (c) 2005 The Gale Group
File 441:ESPICOM Pharm&Med DEVICE NEWS 2005/May W4
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15/3,K/1 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

08850322 Supplier Number: 76876404 (USE FORMAT 7 FOR FULLTEXT)
ePTFE Repairs Septal Defects.
Membrane & Separation Technology News, v19, n10, pNA
July, 2001
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 409

(USE FORMAT 7 FOR FULLTEXT)
TEXT:
...has developed a biocompatible membrane patch that repairs congenital heart defects with a minimally invasive **implant** to eliminate open-heart surgery.
... held in Toronto, Canada May 22-25, 2001. The occluder will be commercially available for **atrial septal** defect (a **hole** between the top two chambers of the heart) and patent foramen ovale (a flap-like **opening** in the **heart wall**) repair in Europe, Australia, South America, and other countries pending regulatory approval. The device is...

...titanium (nitinol) super-elastic wire frame. The occluder is placed in the heart using a **catheter inserted** through a small incision in the groin. The device, positioned to cover the defect and...

...delivery catheter. The Helex septal occluder was one of two winners receiving honors in the **Implant** and Tissue-Replacement Products category at the Fourth Annual 2001 Medical Design Excellence Awards competition...

...In the European trials, the occluder enabled 95% closure at one year with a mean **implant** duration of 292 days. No device fractures or perforations have been reported.
Contact: W. L...

15/3,K/2 (Item 2 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

08833038 Supplier Number: 76699600 (USE FORMAT 7 FOR FULLTEXT)
W.L. Gore & Associates Inc.(HELEX septal occluder device marketed outside United States)(Brief Article)
Health Industry Today, v64, n7, p10
July, 2001
Language: English Record Type: Fulltext
Article Type: Brief Article
Document Type: Newsletter; Professional Trade
Word Count: 184

... U.S., with commercial approval anticipated in about three years.
HELEX is used to treat **atrial septal** defect, a congenital **heart** defect, by closing a **hole** between the two top chambers of the heart. Patients are most often children or young adults.
W.L. Gore said the minimally invasive permanent **implant** provides an alternative to open heart surgery by allowing a cardiologist to place the occluder in the heart using a **catheter** and **inserting** the device through a small incision in the groin.
The company said initial European clinical data for HELEX indicates

95% closure at one year with a mean **implant** duration of 292 days. No device fractures or perforations have been reported.
* www.gore.com

15/3,K/3 (Item 3 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

08666057 Supplier Number: 75086007 (USE FORMAT 7 FOR FULLTEXT)
NEW US CARDIAC DEVICE LAUNCHED IN WIDER OVERSEAS MARKET.
AsiaPulse News, p0832
May 28, 2001
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 697

... of the HELEX Septal Occluder, which indicates 95% closure at one year with a mean **implant** duration of 292 days (range 15-660).
There have been no device fractures or perforations reported.
The HELEX Septal Occluder is used to treat **atrial septal** defect, a congenital **heart** defect, by closing a **hole** between the top two chambers of the heart.
Most often the patients are children or young adults. This minimally invasive permanent **implant** provides an alternative to open heart surgery by allowing a cardiologist to place the occluder in the heart using a **catheter** , **inserted** through a small incision in the groin.
When fully deployed, the flexible, compliant HELEX Septal...

...sutures for use in vascular, cardiac, general surgery and orthopedic procedures. With over 6 million **implants** , these devices have been saving and improving the quality of lives worldwide for the past...

15/3,K/4 (Item 4 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

08665239 Supplier Number: 75055811 (USE FORMAT 7 FOR FULLTEXT)
GORE LAUNCHES NEW SEPTAL OCCLUDER DEVICE OUTSIDE U.S.
PR Newswire, p0714
May 25, 2001
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 666

... of the HELEX Septal Occluder, which indicates 95% closure at one year with a mean **implant** duration of 292 days (range 15-660). There have been no device fractures or perforations reported.
The HELEX Septal Occluder is used to treat **atrial septal** defect, a congenital **heart** defect, by closing a **hole** between the top two chambers of the heart. Most often the patients are children or young adults. This minimally invasive permanent **implant** provides an alternative to open heart surgery by allowing a cardiologist to place the occluder in the heart using a **catheter** , **inserted** through a small incision in the groin.
When fully deployed, the flexible, compliant HELEX Septal...

...sutures for use in vascular, cardiac, general surgery and orthopaedic procedures. With over 6 million **implants** , these devices have been saving

and improving the quality of lives world-wide for the...

15/3,K/5 (Item 5 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

08559871 Supplier Number: 73829170 (USE FORMAT 7 FOR FULLTEXT)
PRODUCT STRATEGY.(Product Announcement)
Health Industry Today, v64, n3, p10
March, 2001
Language: English Record Type: Fulltext
Article Type: Product Announcement
Document Type: Newsletter; Professional Trade
Word Count: 1643

... study reported the company's new ultrasound catheter successfully guided minimally invasive surgical closure of **holes** in the **heart** , such as **atrial septal** defects (ASD) and patent foramen ovale (PFO).
Acuson, a wholly owned subsidiary of Siemens Medical...

...Medical Corp., Austin, Texas, says its subsidiary, Encore Orthopedics Inc., has made a new hip **implant** available to orthopedic surgeons that will aid in eliminating polyethylene wear, a problem the company calls a major cause of **implant** loosening.
The device is a metal insert that replaces traditional polyethylene inserts that mate with...first and only" electronic ambulatory infusion pump designed to use low-cost straight-line PVC **tubing administration** sets at both hospital and alternate care sites.
Mike Parsee, chairman and CEO of Curlin...
PRODUCT NAMES: *3849900 (Medical Equipment NEC); 3841200 (Medical Monitoring & Diagnostic Eqp); 3842247 (**Catheter** Sheath **Introducers**) ; 3841521 (Ultrasound Therapy Equip); 3842150 (Disposable Medical Supplies)

15/3,K/7 (Item 7 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

07187513 Supplier Number: 61380141 (USE FORMAT 7 FOR FULLTEXT)
NMT Medical, Inc. Begins Commercial Introduction of the CardioSEAL(R) Septal Occluder to Treat Patients With PFOs Under Humanitarian Use Designation From The FDA.
PR Newswire, p0168
April 7, 2000
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 996

... approval to update their status to include PFO. Among the prominent centers planning to begin **implantations** , or which are already **implanting** the CardioSEAL are: Columbia Presbyterian, New York; Stanford Medical Center, San Francisco; St. Lukes Hospital...

...septal defects in patients at high risk of morbidity or mortality resulting from surgery. Muscular **ventricular septal** defects (" **holes** "), located at the rear of the septum or at the base of the heart, are...

15/3,K/8 (Item 8 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

06992381 Supplier Number: 59126832 (USE FORMAT 7 FOR FULLTEXT)
NMT Medical Receives FDA Approval for Its CardioSEAL(R) Septal Occluder For The Treatment of Patent Foramen Ovale Under Humanitarian Use Designation.
PR Newswire, p0509
Feb 2, 2000
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 867

... device since September 1999.
In this most recent approval, the CardioSEAL Septal Occluder -- a cardiac **implant** designed to close holes in the heart -- has been approved under HUD for closing patent...

...septal defects in patients at high risk of morbidity or mortality resulting from surgery. Muscular **ventricular septal** defects (" **holes** "), located at the rear of the septum or at the base of the heart, are...

...in September, 31 interventional cardiology centers have received Institutional Review Board (IRB) approval to begin **implantation** of the CardioSEAL. Another 46 centers are in the process of gaining approval to begin **implants** . The CardioSEAL is commercially available in Europe under CE Mark approval and is also being...

15/3,K/9 (Item 9 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

06857769 Supplier Number: 58120109
FDA gives tentative OK to NMT Medical's cardiac implant .
Stringer, Judy
Mass High Tech, p14(1)
Oct 18, 1999
Language: English Record Type: Abstract
Document Type: Magazine/Journal; Trade

FDA gives tentative OK to NMT Medical's cardiac implant .

ABSTRACT:
NMT Medical Inc of Boston, MA, has received approval from the US Food and Drug **Administration** to market its cardiac **implant** designed for closing **holes** in the **heart** . CardioSeal **Septal** Occluder has been cleared for use in closing **ventricular septal** defects and **holes** made during a cardiac procedure. The device's potential market could be as large as...
PRODUCT NAMES: *3842134 (Surgical & Radioactive **Implants**)

15/3,K/10 (Item 10 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

06665407 Supplier Number: 55888072 (USE FORMAT 7 FOR FULLTEXT)
NMT Medical Receives Second Approval from the FDA for the CardioSEAL(R) Septal Occluder Under Humanitarian Use Designation.
PR Newswire, p4768

Sept 28, 1999
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 719

... Company has received for the device.
In this case, the CardioSEAL Septal Occluder, a cardiac **implant** designed to close holes in the heart, has been approved under HUD for closing ventricular septal defects which cannot be closed using standard surgical approaches. **Ventricular septal** defects (" **holes** "), located at the rear of the septum or at the base of the heart, are...

...300 patients with these remotely located ventricular septal defects could be candidates for the CardioSEAL **implant** each year in the U.S.
Under HUD regulations, medical devices that provide safe treatment...

15/3,K/16 (Item 16 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

05511779 Supplier Number: 48351125 (USE FORMAT 7 FOR FULLTEXT)
Nitinol Medical Technologies Receives FDA Approval for Investigational Device Exemption to Conduct a Multi-Center Clinical Trial of the CardioSEAL(R) Septal Occluder for Closure of Patent Foramen Ovale
PR Newswire, p0311NYW133
March 11, 1998
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 648

The CardioSEAL Septal Occluder is a cardiac **implant** designed to close "holes in the heart" using a minimally invasive catheter-based delivery system. PFO is a transient **hole** in the **atrial septum** which may open under straining efforts (coughing, lifting, etc.). PFO has been implicated as a...

15/3,K/25 (Item 7 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB

10123537 SUPPLIER NUMBER: 20391571 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Fixing heart defects without surgery. (Sulzer Osypka GmbH developes new device for closing holes **in** wall **between two** atria **of heart)(Emerging Technologies)**
Industry Week, v247, n6, p18(1)
March 16, 1998
ISSN: 0039-0895 LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 151 LINE COUNT: 00015

Fixing heart defects without surgery. (Sulzer Osypka GmbH developes new device for closing holes **in** wall **between two** atria **of heart)(Emerging Technologies)**

TEXT:
Without having to open the thorax, it is now possible to close **holes** in the **wall** between the two **atria** of the heart, say researchers at Sulzer Osypka GmbH, Grenzach-Wyhlen, Germany. In the procedure...

...coated with polyurethane. Sulzer says the approach offers the possibility of repeated repositioning of the **implant** . The company reports successful clinical trials.

15/3,K/33 (Item 15 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB

02363182 SUPPLIER NUMBER: 03615806 (USE FORMAT 7 OR 9 FOR FULL TEXT)
New weapons in the war on heart disease.
Carey, Joseph
U.S. News & World Report, v98, p70(1)
Jan 28, 1985
CODEN: XNWRA ISSN: 0041-5537 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 913 LINE COUNT: 00073

... cost of up to 5 billion dollars.
Rhythm monitor. A device that can be permanently **implanted** in the chest has been found to prevent death from sudden changes in heart rhythm ...

...patients with the heart defect known as tetralogy of Fallot.
The new procedure closes the **opening** in the **wall** of the **heart** 's two lower chambers and relieves a narrowing of the area near the valve to ...
?

34/TI,K/5 (Item 2 from file: 441)
DIALOG(R)File 441:(c) 2005 ESPICOM Bus.Intell. All rts. reserv.

Combined use of NMT's CardioSEAL septal occluder with STARFlex reported at EFTsymposium in France

(THIS IS THE FULLTEXT)

TEXT:
...time, NMT has announced that it has reimbursement approval from the French government for the **implant** used to treat patients with **PFO** and **ASD** defects. The approval of the so called "TIPS" number, was also formally issued during the...
? t s34/3,k/1-2,4-5

34/3,K/1 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

09261106 Supplier Number: 80597957 (USE FORMAT 7 FOR FULLTEXT)
NMT Medical Receives PMA Approval for CardioSEAL(R) Cardiac Septal Repair Implant.
PR Newswire, pCGTH00806122001
Dec 6, 2001
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 518

(USE FORMAT 7 FOR FULLTEXT)
TEXT:
...Drug Administration (FDA) allowing commercial sale of the Company's CardioSEAL(R) cardiac septal repair **implant** in the United States for patients with ventricular septal defects (**VSD**) that are not candidates for surgical closure. The CardioSEAL(R) **implant** is placed in a minimally invasive, catheter-based procedure in the cardiac catherization laboratory. The...

34/3,K/2 (Item 2 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

06366404 Supplier Number: 54723712 (USE FORMAT 7 FOR FULLTEXT)
NMT Medical's CardioSEAL Septal Occluder With STARFlex Featured in Live Cases At International Symposium in Paris, France.
PR Newswire, p7591
May 25, 1999
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 754

... the successful completion of the process of acquiring French government authorization for reimbursement for the **implant** for treating patients with **PFO** and **ASD** defects. The approval of the so called "TIPS" number, was formally issued during last week...

34/3,K/4 (Item 1 from file: 441)
DIALOG(R)File 441:ESPICOM Pharm&Med DEVICE NEWS
(c) 2005 ESPICOM Bus.Intell. All rts. reserv.

00040847 00044476 (USE FORMAT 7 OR 9 FOR FULLTEXT)

NMT Medical receives conditional PMA for CardioSEAL

Medical Industry Week
18 December 2001 (20011218)
RECORD TYPE: FULLTEXT WORD COUNT: 92

COMPANY: NMT Medical

(THIS IS THE FULLTEXT)

TEXT:
...Medical has received pre-market approval to market the company's CardioSEAL cardiac septal repair **implant** in the US for patients with ventricular septal defects (**VSD**) that are not candidates for surgical closure. The CardioSEAL **implant** is placed in a minimally-invasive, catheter-based procedure in the cardiac catherisation laboratory. The...

34/3,K/5 (Item 2 from file: 441)
DIALOG(R)File 441:ESPICOM Pharm&Med DEVICE NEWS

00021109 00023881 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Combined use of NMT's CardioSEAL septal occluder with STARFlex reported at EFTsymposium in France

Medical Industry Week
28 May 1999 (19990528)
RECORD TYPE: FULLTEXT WORD COUNT: 386

COMPANY: Nitinol Medical Technologies

(THIS IS THE FULLTEXT)

TEXT:
...time, NMT has announced that it has reimbursement approval from the French government for the **implant** used to treat patients with **PFO** and **ASD** defects. The approval of the so called "TIPS" number, was also formally issued during the...
?

38/3,K/25 (Item 25 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

04863632 Supplier Number: 47153719 (USE FORMAT 7 FOR FULLTEXT)
Nitinol Medical Technologies Obtains FDA Approval to Add Investigational Sites for Pivotal Clinical Trial of CardioSEAL Septal Occluder
PR Newswire, p0224NYM131
Feb 24, 1997
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 657

... of the device, making participation in the trial available to an increased patient population."

The **CardioSEAL** Septal Occluder is a cardiac implant designed to close "holes in the **heart** " using a minimally invasive catheter-based delivery system. In August 1996, Nitinol Medical received approval...

...Device Exemption from the FDA to conduct a multi-center pivotal clinical trial of the **CardioSEAL** , and implants of the device have been underway since October. Current participants in the trial...

...California San Francisco. Additionally, five European centers and one Canadian center are currently implanting the **CardioSEAL** under a clinical investigational protocol. Pending successful completion of these clinical trials, the Company is planning a European launch of the **CardioSEAL** later this year. It is estimated that on an annual basis, approximately 200,000 patients worldwide could benefit from the **CardioSEAL** procedure.

The current standard treatment for such defects is open **heart** surgery, which involves opening the patient's chest, cutting through the sternum, connecting the patient to a **heart** /lung machine and opening the **heart** to surgically repair the hole. Such a procedure is costly and generally requires up to a week of hospitalization and an extensive recovery period. By contrast, Nitinol Medical's **CardioSEAL** is designed to be delivered in conjunction with a minimally invasive catheter delivery system, negating the need for surgery. To date, the **CardioSEAL** implant procedures have taken about one and one-half hours to complete, with patients returning...

38/3,K/30 (Item 5 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB

09878531 SUPPLIER NUMBER: 20005851 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Nitinol Medical Technologies Announces CardioSEAL **(TM) Clinical Results At American** Heart **Association Annual Meeting in Orlando, Florida**
PR Newswire, p1113NYTH129
Nov 13, 1997
LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 651 LINE COUNT: 00060

Nitinol Medical Technologies Announces CardioSEAL **(TM) Clinical Results At American** Heart **Association Annual Meeting in Orlando, Florida**

TEXT:

...Medical Technologies, Inc. (Nasdaq-NNM: NMTI) today announced preliminary clinical results for the Company's **CardioSEAL** (TM) Septal Occluder presented by two investigators at the annual meeting of the

American **Heart** Association held in Orlando, Florida.
... the initial results from a multi-center North American clinical trial for use of the **CardioSEAL** for transcatheter closure of isolated secundum **atrial** septal defects (" **ASD** ") in patients considered to be candidates for open **heart** surgical repair. Of 82 patients implanted with the **CardioSEAL** , 96% achieved a clinically successful result. Dr. Zahn concluded that this preliminary data suggests that the **CardioSEAL** is a safe and effective device for transcatheter **ASD** closure.
Kathy J. Jenkins, M.D. reported on the initial experience with the use of the **CardioSEAL** for transcatheter closure of complex cardiac defects in high risk patients in a study sponsored...

...of morbidity/mortality if treated surgically. Dr. Jenkins reported on 117 patients implanted with 162 **CardioSEAL** devices between May 1996 and August 1997 for a variety of cardiac defects, including **ASD** , **ventricular** septal defects, **patent foramen ovale** (**PFO**) and fenestrated fontan. Dr. Jenkins concluded that the findings suggest that the **CardioSEAL** will be an important alternative to surgery for high risk patients.
Thomas M. Tully, President...

...Technologies commented, "We continue to be very encouraged by the worldwide clinical experience with the **CardioSEAL** Septal Occluder. The preliminary findings reported at the American **Heart** Association meeting suggest both the effectiveness of the **CardioSEAL** and the potential versatility of the device for a variety of clinical applications. Further investigations of the device are ongoing in North America. The **CardioSEAL** is commercially available in most countries elsewhere in the world."
Nitinol Medical Technologies, Inc. designs...

38/3,K/33 (Item 2 from file: 441)

00026388 00029747 (USE FORMAT 7 OR 9 FOR FULLTEXT)

NMT offers CardioSEAL **to** PFO **patients on HUD grounds**

Medical Industry Week
25 February 2000 (20000225)
RECORD TYPE: FULLTEXT WORD COUNT: 264

COMPANY: NMT Medical

(THIS IS THE FULLTEXT)

NMT offers CardioSEAL **to** PFO **patients on HUD grounds**

TEXT:
...Medical has begun the commercial introduction of the CardioSEAL septal occluder for use in treating **patent foramen ovale** (**PFO**) in patients with recurrent stroke due to embolism through the **PFO** . The company received FDA clearance for this indication on 2nd February 2000, under Humanitarian Use...
...HUD) regulations, for patients with recurrent cryptogenic stroke due to presumed paradoxical embolism through a **PFO** and who have failed conventional drug therapy such as the anticoagulant, coumadin. This represented the...

...include PFO.

In two earlier FDA actions during September, 1999, NMT obtained approval for the **CardioSEAL** under HUD regulations for closing fenestrated Fontan procedures and for closing muscular **ventricular** septal defects in patients at high risk of morbidity or mortality resulting from surgery. Each...

38/3,K/34 (Item 3 from file: 441)
DIALOG(R)File 441:ESPICOM Pharm&Med DEVICE NEWS

00026052 00029411 (USE FORMAT 7 OR 9 FOR FULLTEXT)

NMT gets HUD clearance to use CardioSEAL **septal occluder for** patent foramen ovale **treatment**

Medical Industry Week
11 February 2000 (20000211)
RECORD TYPE: FULLTEXT WORD COUNT: 328

COMPANY: NMT Medical

(THIS IS THE FULLTEXT)

NMT gets HUD clearance to use CardioSEAL **septal occluder for** patent foramen ovale **treatment**

TEXT:
...company has received for the device since September 1999.
In this most recent development, the **CardioSEAL** Septal Occluder, a cardiac implant designed to close holes in the **heart** , has been approved for closing **patent foramen ovale** (**PFO**) in patients with recurrent cryptogenic stroke, due to presumed paradoxical embolism through a **PFO** and who have failed conventional drug therapy such as the anticoagulant, coumadin. **PFO** is a transient hole in the **heart** that may open under straining efforts and has been implicated as a possible cause of embolic strokes, in which small blood clots escape through the **PFO** and travel to the brain.
In two separate FDA actions during September 1999, the company obtained approval for the **CardioSEAL** under HUD regulations for closing fenestrated Fontan procedures and for closing muscular **ventricular** septal defects in patients with a high risk of morbidity or mortality as a result...

38/3,K/41 (Item 10 from file: 441)
DIALOG(R)File 441:ESPICOM Pharm&Med DEVICE NEWS

00011179 00012629 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Nitinol Medical Technologies announces CardioSeal clinical results

Medical Device Companies Analysis
14 November 1997 (19971114)
RECORD TYPE: FULLTEXT WORD COUNT: 228

COMPANY: Nitinol Medical Technologies Inc; American Heart Association; Miami Children's Hospital

(THIS IS THE FULLTEXT)

TEXT:
Preliminary clinical results for Nitinol Medical Technologies Inc's **CardioSeal** Septal Occluder have been presented by two investigators at the annual meeting of the American **Heart** Association held in Orlando, Florida.
Evan M. Zahn, MD from Miami Children's Hospital, Miami...

...reported the initial results from a multicentre North American clinical trial for use of the **CardioSeal** for transcatheter closure of isolated secundum **atrial** septal defects (**ASD**) in patients considered to be candidates for open **heart** surgical repair. Of 82 patients implanted with the **CardioSeal** , 96 per cent achieved a clinically successful result. Dr. Zahn concluded that this preliminary data suggests that the **CardioSeal** is a safe and effective device for transcatheter **ASD** closure.
Kathy J. Jenkins, MD reported on the initial experience with the use of the **CardioSeal** for transcatheter closure of complex cardiac defects in high risk patients in a study sponsored...

...of morbidity/mortality if treated surgically. Dr. Jenkins reported on 117 patients implanted with 162 **CardioSeal** devices between May 1996 and August 1997 for a variety of cardiac defects, including **ASD** , **ventricular** septal defects, **patent foramen ovale** (**PFO**) and fenestrated fontan. Dr. Jenkins concluded that the findings suggest that the **CardioSeal** will be an important alternative to surgery for high risk patients.

38/3,K/45 (Item 14 from file: 441)
DIALOG(R)File 441:ESPICOM Pharm&Med DEVICE NEWS

00002779 00009590 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Technology/R&D - Fidus - Microwave Cardiac Ablation System - Nitinol Medical Technologies - Cardioseal Septal Occluder

Medistat News
30 June 1997 (19970630)
RECORD TYPE: FULLTEXT WORD COUNT: 334

(THIS IS THE FULLTEXT)

TEXT:
...Medizinische Hochsule in Hannover, Germany, summarised the preliminary data on 24 patients implanted with the **CardioSeal** Septal Occluder for repair of a secundum **atrial** septal defect. In 23 of the 24 patients, implantation of the **CardioSeal** produced a clinically successful result. One patient had the device removed during elective surgery 24...

...implant, when it was determined that the patient also had a large aneurysm in the **atrial** septum which required surgical repair. The patients ranged in age from 30 months to 14...
...flouroscopy time of 17.5 minutes. The authors concluded that their "first experience with the **CardioSeal** resulted in safe delivery, short flouroscopy time and a quite successful **ASD** closure rate."
The CardioSeal Septal Occluder is now commercially available outside the United States and...

...be co-ordinated through the company's Dutch subsidiary, Nitinol Medical Technologies International, BV.

The **CardioSeal** Septal Occluder is a cardiac implant designed to close "holes in the **heart** " using a minimally invasive catheter-based delivery system. Since October 1996, the company has been conducting a multi-centre pivotal clinical trial of the **CardioSeal** at key sites across the US. Ten centres are currently participating in this trial. Additionally, five European centres and one Canadian centre have been implanting the **CardioSeal** under a clinical investigational protocol.
?

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Set      Items   Description
S1     1989600   CATHETER? OR TUBE? ? OR TUBING OR TUBULAR OR CANNULA OR CA-
             NULA OR STENT? OR PIPE OR PIPING OR INTUBAT? OR PROSTHE? OR S-
             HUNT? OR BYPASS??? OR BY()PASS?? OR INDWELL??? OR  IMPLANT? OR
              ELONGAT?(3N)(BODY OR BODIES OR MEMBER?)
S2       75987   HEART? OR CORONAR? OR VENTRIC? OR ATRIA? ? OR ATRIUM? ? OR
             INTERVENTRIC? OR ARTIOVENTRIC? OR INTERATRIA? OR ATRIORUM()CO-
             RDIS OR MYOCARDIA?
S3     1348097   INTERSTITIAL? OR INTER()STITIAL? OR MEMBRANE? OR WALL? ? OR
              SEPTAL? OR SEPTUM? OR SEPTA
S4     3674078   OPENING? OR PASSAG? OR HOLE? ? OR WINDOW? OR OUTLET? OR IN-
             LET? OR CHANNEL?
S5         419   OVAL??(N)(FOSSA? ?) OR (PATENT? ? OR OVALE? ?)(N) FORAMEN?
             OR PFO OR ASD OR VSD
S6     2201419   INSERT? OR ENTER??? OR IMPLANT? OR INTERJECT? OR INTRODUC?
             OR ADMINIST? OR ADMIT???? OR ADMISSION
S7        2426   S2(5N)S3
S8         226   S7(5N)S4
S9         644   S8 OR S5
S10     293301   S1(5N)S6
S11         73   S9 AND S10
S12    2151436   PY=2004:2005
S13    2961510   PY=2002:2003
S14         28   S11 NOT S12:S13
S15         76   S9 (10N) S1
S16         47   S15 NOT S11
S17         24   S16 NOT S12:S13
S18       1416   S2(3N)S4
S19    1267217   PRE()EXIST??? OR PREEXIST??? OR PREVIOUS? OR PRIOR? OR PRE-
             CED? OR ANTECED? OR FORERUN? OR BEFORE OR EARLIER
S20    1246609   EXIST??? OR PRESENT? OR OCCUR? OR HAPPEN?
S21     449034   NATURAL? OR UNARTIFICIAL? OR NONARTIFICIAL? OR INARTIFICIA-
             L? OR ARTIFICIAL? OR REAL
S22         49   S18 (5N) S19:S21
S23         20   S22 AND S1
S24         13   S23 NOT S12:S13
S25        196   S18 (10N) S1
S26        117   S25 NOT S12:S13
S27        101   S26 NOT (S14 OR S17 OR S23)
S28        148   S18(5N)S1
S29         38   S28 (10N) S6
S30         14   S29 NOT S12:S13
S31         14   S30 NOT (S14 OR S17)
S32         49   S8 AND S19:S21
S33         35   S32 AND S1
S34          6   S33 NOT (S14 OR S17 OR S12:S13)
? show files
File 347:JAPIO Nov 1976-2005/Feb(Updated 050606)
         (c) 2005 JPO & JAPIO
File 350:Derwent WPIX 1963-2005/UD,UM &UP=200540
         (c) 2005  Thomson Derwent
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14/5/6 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013759740 **Image available**
WPI Acc No: 2001-243952/200125
XRAM Acc No: C01-073062
XRPX Acc No: N01-173687
Occlusion device for the closure or repair of vascular or septal apertures includes, upper and lower elastic shape memory fixation devices formed from wire strands
Patent Assignee: CARDIA INC (CARD-N)
Inventor: BUONOMO P M; CORCORAN M P; MARINO J A
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6206907	B1	20010327	US 99307288	A	19990507	200125	B

Priority Applications (No Type Date): US 99307288 A 19990507
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6206907	B1		16	A61B-017/08	

Abstract (Basic): US 6206907 B1
NOVELTY - An occlusion device includes a center strut extending in an axial direction, upper and lower elastic shape memory fixation devices (14), and two sheets attached to the upper and lower fixation devices. The fixation devices are formed of stranded wire (52) comprising wires (56) laid together.
USE - For the closure or repair of vascular or septal apertures such as patent ductus arteriosus, **patent foramen ovale** , atrial septal defects, or ventricular septal defects.
ADVANTAGE - The device is more durable than prior art devices and will not suffer from fatigue failures caused by the human heart. It has increased strength and cycle life without great increase in size. It is also collapsible and can be **inserted** into an anomaly by a **catheter** .
DESCRIPTION OF DRAWING(S) - The figure shows a perspective view of the cable used in the elastic shape memory fixation device.
Stranded wire (52)
Center wire (54)
Wires (56)
Core (58)
pp; 16 DwgNo 4/19
Title Terms: OCCLUDE; DEVICE; CLOSURE; REPAIR; VASCULAR; SEPTUM; APERTURE; UPPER; LOWER; ELASTIC; SHAPE; MEMORY; FIX; DEVICE; FORMING; WIRE; STRAND
Derwent Class: A96; P31
International Patent Class (Main): A61B-017/08
File Segment: CPI; EngPI

14/5/7 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012840887 **Image available**
WPI Acc No: 2000-012719/200001
Related WPI Acc No: 1995-223538; 1996-401428; 1998-178372; 2000-104863; 2001-513528; 2002-267747; 2003-066281
XRPX Acc No: N00-009891
Coronary sinus catheter

Patent Assignee: DAIG CORP (DAIG-N)
Inventor: BENDITT D G; FLEISCHHACKER J J; LURIE K G; OCKULY J D; SHULTZ J J
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5984909	A	19991116	US 93106383	A	19930813	200001	B
			US 95371849	A	19950112		
			US 97996887	A	19971223		
			US 98146857	A	19980903		

Priority Applications (No Type Date): US 93106383 A 19930813; US 95371849 A 19950112; US 97996887 A 19971223; US 98146857 A 19980903
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5984909	A		10	A61M-025/00	Cont of application US 93106383
					Cont of application US 95371849
					Cont of application US 97996887
					Cont of patent US 5423772
					Cont of patent US 5549581

Abstract (Basic): US 5984909 A

NOVELTY - The catheter (10) has a preformed curved distal end section sized and shaped to place the tip of the catheter adjacent the ostium (22) of the coronary sinus when the distal section is inserted into the right atrium though the superior vena cava (24, 26). The tip is hook shaped for facilitating the entry of the catheter into the ostium.

USE - For electrophysiological sensing in the coronary sinus.

ADVANTAGE - Facilitates entry into the right structure, the ostium, among the number of structures in the right atrium which may easily be confused with the coronary sinus.

DESCRIPTION OF DRAWING(S) - The drawing shows the **catheter inserted** into the right atrium.

Catheter (10)
Ostium (22)
Superior vena cava (24, 26)
Fossa ovalis (28)
Tricuspid valve (32)

pp; 10 DwgNo 1/4
Title Terms: CORONARY; SINUS; CATHETER
Derwent Class: P34; S05
International Patent Class (Main): A61M-025/00
File Segment: EPI; EngPI

14/5/10 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012597801 **Image available**
WPI Acc No: 1999-403907/199934
XRPX Acc No: N99-300987
Balloon catheter for abrading a patent foramen ovale
Patent Assignee: HEARTEN MEDICAL INC (HEAR-N)
Inventor: NGUYEN H V; STAMBAUGH B D
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5919200	A	19990706	US 98169142	A	19981009	199934	B

Priority Applications (No Type Date): US 98169142 A 19981009

Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes
US 5919200 A 9 A61B-017/22

Abstract (Basic): US 5919200 A

NOVELTY - Balloon catheter has a sheath catheter with proximal and distal ends. A **foramen ovale** balloon catheter (16) is deployably retained within the sheath catheter. An inflatable balloon (19) is attached near the distal end of the balloon catheter, and several abrasive members in the form of cylinders are attached over the inflatable balloon.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is given for a method of abrading the **patent foramen ovale** which includes **insertion** of the **introducer catheter** into the patient of the vessel.

USE - As a minimally invasive device for closing a **patent foramen ovale** in the field of fetal blood circulation after birth of baby.

ADVANTAGE - Does not include the risks of open heart procedures, is easy to perform, does not leave behind any foreign material.

DESCRIPTION OF DRAWING(S) - The figure shows a schematic view.
balloon catheter (16)
Y-type fitting (19)
balloon (26)
pp; 9 DwgNo 3/7

Title Terms: BALLOON; CATHETER; ABRASION; PATENT
Derwent Class: P31
International Patent Class (Main): A61B-017/22
File Segment: EngPI

14/5/14 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011479390 **Image available**
WPI Acc No: 1997-457297/199742
Related WPI Acc No: 1999-610147; 2000-364059
XRPX Acc No: N97-380889

Device for insertion into heart wall suited for trans-myocardial revascularisation - has elongated body adapted to be secured in opening **formed in** heart wall **, and tab etc. for holding elongated body in place in** heart wall opening

Patent Assignee: MYOCARDIAL STENTS INC (MYOC-N); ENERGY LIFE SYSTEM CORP (ENER-N)
Inventor: HUSSEIN H; SULEK S
Number of Countries: 021 Number of Patents: 008
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9732551	A1	19970912	WO 97US3523	A	19970303	199742	B
US 5810836	A	19980922	US 9612801	A	19960304	199845	
			US 96739724	A	19961107		
EP 891172	A1	19990120	EP 97908913	A	19970303	199908	
			WO 97US3523	A	19970303		
US 5878751	A	19990309	US 96739724	A	19961107	199917	
			US 97954115	A	19971020		
CA 2240956	A1	20000113	CA 2240956	A	19980713	200026	N
US 6080163	A	20000627	US 9612801	A	19960304	200036	
			US 96739724	A	19961107		
			US 9898013	A	19980615		
JP 2001505442	W	20010424	JP 97531940	A	19970303	200130	

			WO 97US3523	A	19970303	
US 6258119	B1	20010710	US 96739724	A	19961107	200141
			US 988695	A	19980119	
			US 99293632	A	19990415	

Priority Applications (No Type Date): US 96739724 A 19961107; US 9612801 P 19960304; US 97954115 A 19971020; CA 2240956 A 19980713; US 9898013 A 19980615; US 988695 A 19980119; US 99293632 A 19990415
Cited Patents: US 4477930; US 5287861; US 5354309; US 5376114; US 5380299
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9732551	A1	E	32	A61F-011/00	
Designated States (National): JP					
Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
US 5810836	A			A61F-011/00	Provisional application US 9612801
EP 891172	A1	E			Based on patent WO 9732551
Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LI NL PT SE					
US 5878751	A			A61B-019/00	Div ex application US 96739724 Div ex patent US 5810836
CA 2240956	A1	E		A61B-017/39	
US 6080163	A			A61F-011/00	Provisional application US 9612801 Div ex application US 96739724 Div ex patent US 5810836
JP 2001505442	W		22	A61F-002/06	Based on patent WO 9732551
US 6258119	B1			A61F-002/06	Div ex application US 96739724 Cont of application US 988695 Div ex patent US 5810836

Abstract (Basic): WO 9732551 A

The device (22) comprises a member for the delivery from the heart chamber into the heart wall (25) of blood nutrients. The device has a hollow cylindrical body (21) containing a cavity and side ports (23) situated within that cavity. The cavity is in fluid communication with the heart chamber.

The side ports are in fluid communication with the heart wall. Distal and proximal end regions of the device provide tabs (65) to secure the device in the heart wall. The system (36) for the **insertion** of the device includes a **tubular** body and a needle point.

ADVANTAGE - Provides device for producing trans-myocardial channels that are likely to remain patent, and that do not require laser application for generating these channels.

Dwg.1/10

Title Terms: DEVICE; INSERT; HEART; WALL; SUIT; TRANS; MYOCARDIUM; ELONGATE ; BODY; ADAPT; SECURE; OPEN; FORMING; HEART; WALL; TAB; HOLD; ELONGATE; BODY; PLACE; HEART; WALL; OPEN
Derwent Class: P31; P32
International Patent Class (Main): A61B-017/39; A61B-019/00; A61F-002/06; A61F-011/00
International Patent Class (Additional): A61F-002/06
File Segment: EngPI

14/5/18 (Item 13 from file: 350)
DIALOG(R)File 350:Derwent WPIX

009150751 **Image available**
WPI Acc No: 1992-278189/199234
Related WPI Acc No: 1994-199875; 1994-293057; 1995-147201; 1995-230564;

1995-357616; 1995-403040; 1997-247158
XRPX Acc No: N92-212762

Catheter probe for endocardial mapping - has sensors mounted on expandable unit which expands to place the sensors in contact with heart wall

Patent Assignee: CARDIAC PATHWAYS CORP (CARD-N)
Inventor: IMRAN M A; IMRAN M
Number of Countries: 017 Number of Patents: 011
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 499491	A2	19920819	EP 92301264	A	19920217	199234	B
AU 9210889	A	19920820	AU 9210889	A	19920212	199241	
CA 2061219	A	19920816	CA 2061219	A	19920214	199245	
US 5156151	A	19921020	US 91656764	A	19910215	199245	
US 5228442	A	19930720	US 91656764	A	19910215	199330	
			US 92859054	A	19920327		
			US 92985370	A	19921203		
US 5239999	A	19930831	US 91656764	A	19910215	199336	
			US 92859054	A	19920327		
			US 92919298	A	19920724		
EP 499491	A3	19930203	EP 92301264	A	19920217	199347	
US 5279299	A	19940118	US 91656764	A	19910215	199404	
			US 92919198	A	19920724		
US 5404638	A	19950411	US 91656764	A	19910215	199520	
			US 92859054	A	19920327		
			US 92919199	A	19920724		
			US 93104738	A	19930811		
			US 94272944	A	19940711		
US 5406946	A	19950418	US 91656764	A	19910215	199521	
			US 92859054	A	19920327		
			US 92919199	A	19920724		
			US 93104738	A	19930811		
			US 94182635	A	19940114		
AU 662119	B	19950824	AU 9210889	A	19920212	199542	

Priority Applications (No Type Date): US 91656764 A 19910215; US 92859054 A 19920327; US 92985370 A 19921203; US 92919298 A 19920724; US 92919198 A 19920724; US 92919199 A 19920724; US 93104738 A 19930811; US 94272944 A 19940711; US 94182635 A 19940114
Cited Patents: No-SR.Pub; DE 7309739; EP 206248; EP 9732; US 4699147; US 4709698; WO 8906148
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 499491	A2	E	17	A61N-001/05	
Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LI LU NL SE					
US 5156151	A		17	A61B-005/04	
US 5228442	A		15	A61N-001/04	Div ex application US 91656764 Cont of application US 92859054 Div ex patent US 5156151
US 5239999	A		14	A61B-005/04	Div ex application US 91656764 Div ex application US 92859054 Div ex patent US 5156151
US 5279299	A		17	A61B-005/04	Cont of application US 91656764 Cont of patent US 5156151
US 5404638	A		15	H01R-043/033	Cont of application US 91656764 Div ex application US 92859054 Cont of application US 92919199 Cont of application US 93104738 Cont of patent US 5156161
US 5406946	A		15	A61B-005/04	Div ex application US 91656764 Cont of application US 92859054

Cont of application US 92919199
Cont of application US 93104738
Div ex patent US 5156151

AU 662119	B	A61B-005/0408	Previous Publ. patent AU 9210889
AU 9210889	A	A61B-005/0408	
CA 2061219	A	A61B-005/02	
EP 499491	A3	A61N-001/05	

Abstract (Basic): EP 499491 A

The catheter (22) has proximal and distal ends (37, 38) and an elongated tubular member (36). This member has at least one lumen extending through it. A number of longitudinally and radially positioned electrodes are positioned on an expandable device (46) secured to the end of the tubular member.

The expandable device is moved to a chamber of the heart and then expanded. In this state the electrodes positioned along the expandable member are in contact with various parts of the heart wall and provide signals back to processing equipment (29, 32, 33).

ADVANTAGE - Provides large number of electrodes in contact with the heart to speed mapping process.

Dwg.1/21

Title Terms: CATHETER; PROBE; ENDOCARDIAC; MAP; SENSE; MOUNT; EXPAND; UNIT; EXPAND; PLACE; SENSE; CONTACT; HEART; WALL
Derwent Class: P31; P34; S05
International Patent Class (Main): A61B-005/02; A61B-005/04; A61B-005/0408; A61N-001/04; A61N-001/05; H01R-043/033
International Patent Class (Additional): A61B-017/36; A61B-017/39; A61M-025/04
File Segment: EPI; EngPI

14/5/21 (Item 16 from file: 350)
DIALOG(R)File 350:Derwent WPIX

008058429 **Image available**
WPI Acc No: 1989-323541/198944
XRPX Acc No: N89-246456

Implantable **cardiac assist device - comprises conical in elastic balloon percutaneously fed into major blood vessel, connected to catheter and pump**

Patent Assignee: VOSS G (VOSS-I)
Inventor: VOSS G
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 4861330	A	19890829	US 8724986	A	19870312	198944	B

Priority Applications (No Type Date): US 8724986 A 19870312
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4861330	A		9		

Abstract (Basic): US 4861330 A

A balloon member is inserted into the femoral vein, the balloon member being joined in fluid communication to a catheter. The balloon member and catheter are guided within the femoral vein toward the heart, into the interior vena cava and the right atrium.

The balloon member is pushed past the **foramen ovale** into the left atrium and past the mitral valve into the left ventricle of the heart. A pump connected to the catheter member is activated so that the

balloon is inflated during each contraction of the ventricle and deflated shortly after.

USE - For assisting the pumping action of a failed heart

Title Terms: **IMPLANT** ; CARDIAC; ASSIST; DEVICE; COMPRISE; CONICAL; ELASTIC ; BALLOON; PERCUTANEOUS; FEED; MAJOR; BLOOD; VESSEL; CONNECT; CATHETER; PUMP

Derwent Class: P31

International Patent Class (Additional): A61B-019/00

File Segment: EngPI

?

17/5/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO

05241123 **Image available**
PROSTHETIC MATERIAL FOR **ATRIAL** **SEPTAL** DEFECT AND **CATHETER** FOR OBSTRUCTING **ATRIAL** **SEPTAL** DEFECT **HOLE** BY USING THE REPAIRING MATERIAL

PUB. NO.: 08-196623 [JP 8196623 A]
PUBLISHED: August 06, 1996 (19960806)
INVENTOR(s): KOIKE KAZUYUKI
KISHIGAMI YOSHIKAZU
MIYAGAWA KATSUYA
APPLICANT(s): NISSHO CORP [470126] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 07-011479 [JP 9511479]
FILED: January 27, 1995 (19950127)
INTL CLASS: [6] A61M-001/10; A61B-017/00; A61B-017/12
JAPIO CLASS: 28.2 (SANITATION -- Medical)
JAPIO KEYWORD:R057 (FIBERS -- Non-woven Fabrics); R086 (MEDICAL TREATMENT -- Artificial Internal Organs)

ABSTRACT

PURPOSE: To provide a prosthetic material by which a defect site of a patient with atrial septal defect is fixed firmly and permanently by transdermal translumen **catheter** method, and also provide a **catheter** for obstructing the **atrial** **septal** defect **hole** of small or intermediate extent with the repairing materiel by means of a simple means.

CONSTITUTION: A prosthetic material for atrial septal defect is composed of at least two of punctured fixing members 1 which are punctured at rim of septal membrane 21 of atrial septal defect site and can fix the above rim, a board-shaped member 5 for obstructing the atrial septal defect site, and a thread-like material 3 which is attached with the punctured fixing member 1 and penetrates into the board-shaped member 5. The punctured fixing member 1 is a deformable U-shaped metal fitting composed of puncture needles whose both ends are pointed, and the bottom metal fitting of the U-shaped metal fitting is provided with a small hole 6 through which the thread-like material 3 can be inserted

17/5/2 (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO

03331980 **Image available**
INTRAVENOUS ATRIAL SEPTAL DEFECT HOLE CLOSING APPARATUS

PUB. NO.: 02-307480 [JP 2307480 A]
PUBLISHED: December 20, 1990 (19901220)
INVENTOR(s): TANAKA NOBUYUKI
TEI TADAKAZU
APPLICANT(s): TANAKA NOBUYUKI [000000] (An Individual), JP (Japan)
TEI TADAKAZU [000000] (An Individual), JP (Japan)
APPL. NO.: 01-127806 [JP 89127806]
FILED: May 23, 1989 (19890523)
INTL CLASS: [5] A61M-025/00; A61B-017/00
JAPIO CLASS: 28.2 (SANITATION -- Medical)
JOURNAL: Section: C, Section No. 811, Vol. 15, No. 92, Pg. 142, March 06, 1991 (19910306)

ABSTRACT

PURPOSE: To close the defect part of a septum interatriale without performing the incision of the thorax and the heart by connecting the dilated part on the side of the left atrium and the dilated part on the side of the right atrium by a defect hole closing means through the septum interatriale part capable of piercing a defect hole.

CONSTITUTION: The small vein of the cervix is exposed to be incised and a connection tube 4 unified with balloons 1, 2, 3 folded small is inserted in the small vein and passed through the atrial septal defect hole 23 to be inserted in the left atrium 20. For example, a physiologlcal saline solution is injected in a fine tube 5 from the terminal end part thereof on the atmosphere side to inflate the balloon 1 to close the fine tube 5. The balloon 1 is brought into close contact with a septum interatriale 19 and the physiological saline solution is injected in a fine tube 6 to inflate the balloon 2 to close the fine tube 6. The connection pipe 4 is pulled and the physiological saline solution is injected from a fine tube 7 to inflate the balloon 3 in the right atrium 18 to close the fine **tube** 7. The **atrial septal** defect **hole** 23 is closed in a state grasped in an H-shape by the balloon 1 on the side of the left atrium 20, the balloon 2 at the part of the atrial septal defect hole 23 and the balloon 3 on the side of the right atrtum 18 and the fundamental abnormality of an atrial septal defect such that blood flows backward from the left atrium 20 to the right atrium 18 is almost corrected.

17/5/3 (Item 1 from file: 350)

014081451 **Image available**
WPI Acc No: 2001-565665/200163
Related WPI Acc No: 1997-178874; 1999-495781
XRAM Acc No: C01-167937
XRPX Acc No: N01-421141

Suturing device for arterial catheterization, has actuator which drives needles to engage with respective ends of suture at different periods

Patent Assignee: SUTURA INC (SUTU-N)
Inventor: DECKER S; NOBLES A A
Number of Countries: 094 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200167963	A2	20010920	WO 2001US8050	A	20010313	200163	B
AU 200149185	A	20010924	AU 200149185	A	20010313	200208	

Priority Applications (No Type Date): US 2000524211 A 20000313
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200167963	A2	E	148	A61B-017/04	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200149185	A		A61B-017/04	Based on patent WO 200167963

Abstract (Basic): WO 200167963 A2

NOVELTY - The suture has arms (630,630') mounted on an elongated shaft (514), such that the mounting portion moves away from the shaft towards different directions. The suture has needles (650,650')

engaging the end portions of suture respectively. An actuator drives the needles, such that the engagement of respective suture end portions is non-simultaneous.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for suture forming method.

USE - For arterial catheterization to form a small percutaneous incision in femoral or other arteries and to form cuts, punctures, incisions and other openings in various biological tissues such as blood vessels. Also, for **cathetering** of ductus arteriosus, **foramen ovale** , heart defect, puncture wound in skin, atrial septal defect (ASD), etc.

ADVANTAGE - Provides reliable engagement of needles with suture and prevents condition of needles to come in contact with the suture at the same time by actuating the end of needles.

DESCRIPTION OF DRAWING(S) - The figure shows the suture device.

Elongated shaft (514)

Arms (630,630')

Needles (650,650')

pp; 148 DwgNo 78/102

Title Terms: SUTURE; DEVICE; ARTERY; CATHETER; ACTUATE; DRIVE; NEEDLE; ENGAGE; RESPECTIVE; END; SUTURE; PERIOD

Derwent Class: A96; P31

International Patent Class (Main): A61B-017/04

File Segment: CPI; EngPI

17/5/5 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

013293520 **Image available**

WPI Acc No: 2000-465455/200040

XRPX Acc No: N00-347466

Cannula system for cardiac support, has pumping assembly which sucks blood from right atrium and left atrium and ventricle and supplies it to pulmonary artery and aorta to provide right and left heart support

Patent Assignee: A-MED SYSTEMS INC (AMED-N)

Inventor: ABOUL-HOSN W N; AKIN J; GUIDERA M; KANZ W R; MATHENY R G

Number of Countries: 087 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200037139	A1	20000629	WO 99US30816	A	19991223	200040	B
AU 200024851	A	20000712	AU 200024851	A	19991223	200048	

Priority Applications (No Type Date): US 98113771 P 19981223

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200037139	A1	E	47	A61N-001/362	

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200024851	A		A61N-001/362	Based on patent WO 200037139

Abstract (Basic): WO 200037139 A1

NOVELTY - An outer cannula (14) with inlet (20) is placed within the right atrium of the heart, and an inner **cannula** (12) with an **inlet** (25) and **atrial septum** is placed within either the left atrium or ventricle of the heart. The pumping assembly withdraws blood

from the right and left atrium and ventricle, and delivers it to the pulmonary artery and aorta, to provide respective right and left heart supports.

DETAILED DESCRIPTION - An inner cannula (12) is placed within an outer cannula (14) and an inlet (23) extends through the inlet (20) of outer cannula. Right and left heart supports are provided by a coupling pumping assembly with cannulas.

USE - For cardiac support.

ADVANTAGE - Eliminating the oxygenator and blood filter from the bypass circuit reduces hemolysis by minimizing the extent to which blood contacts foreign surfaces. Reduces the tubing which serves to lower the primary volume of the bypass circuit, which in turn lessens the amount of saline introduced into blood during a priming operation. Minimizing the amount of saline added to blood reduces the possibility that the patient will require a blood transfusion. By incorporating sensing devices within the cannula, eliminates further incision and devices from a bypass circuit thereby simplifying the circuit and reducing overall cost.

DESCRIPTION OF DRAWING(S) - The figure shows the schematic view of the cannula system.

Cannulas (12,14)

Inlets (20,23,25)

pp; 47 DwgNo 1/19

Title Terms: CANNULA; SYSTEM; CARDIAC; SUPPORT; PUMP; ASSEMBLE; SUCK; BLOOD ; RIGHT; ATRIUM; LEFT; ATRIUM; VENTRICLE; SUPPLY; PULMONARY; ARTERY; AORTA; RIGHT; LEFT; HEART; SUPPORT

Derwent Class: P34; S05

International Patent Class (Main): A61N-001/362

File Segment: EPI; EngPI

17/5/7 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

012471289 **Image available**

WPI Acc No: 1999-277397/199923

XRPX Acc No: N99-207939

Radio frequency balloon catheter **for causing thermal trauma to** patent foramen ovale **and method of use - comprises sheath** catheter **deployably retaining** foramen ovale catheter **within it; positive and negative electrodes are located at** foramen ovale catheter **distal end, connected to radio frequency energy supply**

Patent Assignee: HEARTEN MEDICAL INC (HEAR-N)

Inventor: BROWN T R; NGUYEN H V; STAMBAUGH B D

Number of Countries: 083 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9918871	A1	19990422	WO 98US21459	A	19981009	199923	B
AU 9910777	A	19990503	AU 9910777	A	19981009	199937	

Priority Applications (No Type Date): US 9761585 P 19971010

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9918871	A1	E	21	A61B-017/39	

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 9910777 A A61B-017/39 Based on patent WO 9918871

Abstract (Basic): WO 9918871 A

NOVELTY - The radio frequency **catheter** has a sheath **catheter** with a **foramen ovale catheter** deployably retained within it. Positive and negative electrodes are located at the end of the **foramen ovale catheter** connected to a radio frequency energy supply. A thermocouple monitors the temperature of the tissue that comes into contact with the electrodes. DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method using the catheter.

USE - Minimally invasive device for closing a patent foramen ovale.

ADVANTAGE - The method is least invasive and does not have the associated risk of an open heart procedure, is technically easy to perform and does not leave any foreign material behind. DESCRIPTION OF DRAWING(S) - The drawing shows a schematic plan view of the radio frequency balloon catheter and an axial cross sectional view of the distal end of the **catheter** . (11) Sheath **catheter** ; (16) **Foramen ovale** balloon **catheter** ; (26) Inflatable balloon; (31) Radio frequency energy supply; (41, 42) Radio frequency electrodes; (43) Thermocouple.

Dwg.3,4/10

Title Terms: RADIO; FREQUENCY; BALLOON; CATHETER; CAUSE; THERMAL; TRAUMA; PATENT; METHOD; COMPRISE; SHEATH; CATHETER; RETAIN; CATHETER; POSITIVE; NEGATIVE; ELECTRODE; LOCATE; CATHETER; DISTAL; END; CONNECT; RADIO; FREQUENCY; ENERGY; SUPPLY

Derwent Class: P31; S05

International Patent Class (Main): A61B-017/39

File Segment: EPI; EngPI

17/5/8 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

012471288 **Image available**

WPI Acc No: 1999-277396/199923

XRPX Acc No: N99-207938

Radio frequency balloon catheter **for causing thermal trauma to** patent foramen ovale **and method of use - comprises sheath** catheter **retaining** foramen ovale **balloon** catheter **inflated by radio frequency energy conducting fluid, heated by electrodes within balloon, receiving radio frequency energy**

Patent Assignee: HEARTEN MEDICAL INC (HEAR-N)

Inventor: BROWN T R; NGUYEN H V; STAMBAUGH B D

Number of Countries: 083 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9918870	A1	19990422	WO 98US21440	A	19981009	199923	B
AU 9910775	A	19990503	AU 9910775	A	19981009	199937	

Priority Applications (No Type Date): US 9762954 P 19971010

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9918870	A1	E	21	A61B-017/39	

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 9910775 A A61B-017/39 Based on patent WO 9918870

Abstract (Basic): WO 9918870 A

NOVELTY - The **catheter** has a sheath (11) **catheter** retaining a **foramen ovale** balloon **catheter** (16) which has an inflatable balloon (26) disposed at its distal end. At least two radio frequency electrodes (41, 42) are attached to the **foramen ovale catheter** within the balloon. The balloon is inflated with a radio frequency energy conducting fluid, heated by a supply of radio frequency energy (31) attached to the electrodes, thermally traumatising adjacent tissue in use. A thermocouple (43) attached within the balloon monitors the temperature within the balloon. DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method using the catheter. TECHNOLOGY FOCUS - The balloon is able to resist deformation at high temperatures and is manufactured from poly-ethylene-terephthalate.

USE - Minimally invasive device for closing a patent foramen ovale.

ADVANTAGE - The method is least invasive and does not have the associated risk of an open heart procedure, is technically easy to perform and does not leave any foreign material behind. DESCRIPTION OF DRAWING(S) - The drawing shows a schematic plan view of the radio frequency balloon catheter and an axial cross sectional view of the distal end of the **catheter** . (11) Sheath **catheter** ; (16) **Foramen ovale** balloon **catheter** ; (26) Inflatable balloon; (31) Radio frequency energy supply; (41, 42) Radio frequency electrodes; (43) Thermocouple.

Dwg.3,4/6

Title Terms: RADIO; FREQUENCY; BALLOON; CATHETER; CAUSE; THERMAL; TRAUMA; PATENT; METHOD; COMPRISE; SHEATH; CATHETER; RETAIN; BALLOON; CATHETER; INFLATE; RADIO; FREQUENCY; ENERGY; CONDUCTING; FLUID; HEAT; ELECTRODE; BALLOON; RECEIVE; RADIO; FREQUENCY; ENERGY

Derwent Class: P31; S05

International Patent Class (Main): A61B-017/39

File Segment: EPI; EngPI

17/5/12 (Item 10 from file: 350)

DIALOG(R)File 350:Derwent WPIX

012324192 **Image available**

WPI Acc No: 1999-130298/199911

Related WPI Acc No: 1993-242930; 1995-006306; 1995-206153; 1996-476776; 1997-051698; 1997-297829; 1997-297832; 1998-120425; 1998-120493; 1998-530718; 1999-059988; 1999-179878; 1999-214453; 1999-277173; 1999-312540; 1999-312547; 1999-385169; 1999-395076; 1999-518494; 1999-580571; 2000-062120; 2000-195426; 2000-204827; 2000-237402; 2000-255603; 2000-422843; 2000-531792; 2000-542909; 2000-587596; 2001-049631; 2001-069745; 2001-070821; 2001-225913; 2001-343206; 2001-424601; 2001-522540; 2001-646987; 2002-082230; 2002-113415; 2002-113443; 2002-121081; 2002-147711; 2002-163510; 2002-170989; 2002-206288; 2002-214577; 2002-370567; 2002-636083; 2003-015692; 2003-028464; 2003-246251; 2003-254801; 2003-361993; 2003-371778; 2003-402920; 2003-417299; 2003-419759; 2003-421185; 2003-567867; 2003-576879; 2003-707520; 2003-755934; 2003-778898; 2003-801399; 2003-895627; 2003-898307; 2003-901104; 2003-902058; 2004-167062; 2004-167544; 2004-224783; 2004-238519; 2004-327350; 2005-080255

XRPX Acc No: N99-094789

Transmocardial revascularization method of heart of patient - involves forming revascularizing channel through portion of heart with high frequency electrical energy and thereby positioning radially expandable

lumen prosthesis within channel
Patent Assignee: ARTHROCARE CORP (ARTH-N)
Inventor: EGGERS P E; THAPLIYAL H V
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5860951	A	19990119	US 92817575	A	19920107	199911 B
			US 92958977	A	19921009	
			US 9359681	A	19930510	
			WO 94US5168	A	19940510	
			US 95485219	A	19950607	
			US 95562331	A	19951122	
			US 96753226	A	19961122	

Priority Applications (No Type Date): US 96753226 A 19961122; US 92817575 A 19920107; US 92958977 A 19921009; US 9359681 A 19930510; WO 94US5168 A 19940510; US 95485219 A 19950607; US 95562331 A 19951122
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5860951	A		37	A61B-001/00	CIP of application US 92817575
					CIP of application US 92958977
					CIP of application US 9359681
					CIP of application WO 94US5168
					CIP of application US 95485219
					CIP of application US 95562331
					CIP of patent US 5366443
					CIP of patent US 5697281

Abstract (Basic): US 5860951 A
NOVELTY - The active electrode surface is positioned in close proximity to a target site on the wall of a patient's heart. A high frequency voltage is applied between the active electrode surface and the return electrode to ablate the tissue at the heart wall and to form a revascularizing channel (264) through a portion of a **heart wall** (260). The **channel** extends through an exterior **heart wall** into a myocardium (262). The radially expandable lumen **prosthesis** is positioned within the revascularizing channel to maintain patency of the channel. DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for electrosurgical myocardial revascularization system.
USE - For ablating heart tissue for increasing flow of blood to patient's heart. In treatment of coronary artery disease.
ADVANTAGE - Allows surgeon to more accurately determine when to terminate cutting of given channel so as to minimize damage to surrounding tissues and to minimize bleading into thoracic cavity. Eliminates need for separate steerable guiding catheter to guide into heart. DESCRIPTION OF DRAWING(S) - The figure shows the sectional view of human heart in which transmocardial revascularization procedure is carried out. (260) Heart wall; (262) Myocardium; (264) Revascularizing channel.
Dwg.11/23
Title Terms: METHOD; HEART; PATIENT; FORMING; CHANNEL; THROUGH; PORTION; HEART; HIGH; FREQUENCY; ELECTRIC; ENERGY; POSITION; RADIAL; EXPAND; LUMEN ; PROSTHESIS; CHANNEL
Derwent Class: P31; S05
International Patent Class (Main): A61B-001/00
File Segment: EPI; EngPI

17/5/17 (Item 15 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010909386 **Image available**
WPI Acc No: 1996-406337/199641
XRPX Acc No: N96-342421
Mending material for closing up hole **in** atrial septum **of** heart **using** catheter **- uses string material which pierces through penetration holes provided in flat member, to couple it with fixation members**
Patent Assignee: NISSHO KK (NISS-N)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 8196623	A	19960806	JP 9511479	A	19950127	199641	B

Priority Applications (No Type Date): JP 9511479 A 19950127
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 8196623	A		6	A61M-001/10	

Abstract (Basic): JP 8196623 A
The bending material is actually composed of a flat member (5). Prior to fixation, pricking up peripheral surface of diaphragm is carried out.
This diaphragm is fixed to a fixation member coupled with penetration pores (4) provided in the mending member. A small hole (6) is provided in each fixation member, through which the string pierces and its end is wound over the fixation member.
ADVANTAGE - Enables permanent fixing up of hole in atrial septum. Does not allow prop to be cut by stress reduction or due to fatigue.
Dwg.1/6
Title Terms: MENDING; MATERIAL; CLOSE; UP; HOLE; ATRIUM; SEPTUM; HEART; CATHETER; STRING; MATERIAL; PIERCE; THROUGH; PENETRATE; HOLE; FLAT; MEMBER; COUPLE; FIX; MEMBER
Derwent Class: P31; P34
International Patent Class (Main): A61M-001/10
International Patent Class (Additional): A61B-017/00; A61B-017/12
File Segment: EngPI

17/5/18 (Item 16 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010294123 **Image available**
WPI Acc No: 1995-195383/199526
XRPX Acc No: N95-153387
Prosthetic device for interatrial septal defect repair - has at least two clips firmly gripping peripheral portions around opening having flat occluder closing opening and two fasteners securing clips
Patent Assignee: NISSHO CORP (NISS-N); NISSHO KK (NISS-N)
Inventor: KISHIGAMI Y; KOIKE K
Number of Countries: 005 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 655222	A1	19950531	EP 94117933	A	19941114	199526	B
JP 7148187	A	19950613	JP 93321353	A	19931126	199532	
US 5507811	A	19960416	US 94339557	A	19941115	199621	
EP 655222	B1	19980610	EP 94117933	A	19941114	199827	
DE 69410937	E	19980716	DE 610937	A	19941114	199834	
			EP 94117933	A	19941114		
JP 3185906	B2	20010711	JP 93321353	A	19931126	200140	

Priority Applications (No Type Date): JP 93321353 A 19931126
Cited Patents: EP 474887; EP 541063
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 655222	A1	E	10	A61B-017/00	
Designated States (Regional): DE FR GB					
JP 7148187	A		6	A61F-002/24	
US 5507811	A		10	A61F-002/00	
EP 655222	B1	E		A61B-017/00	
Designated States (Regional): DE FR GB					
DE 69410937	E			A61B-017/00	Based on patent EP 655222
JP 3185906	B2		5	A61F-002/24	Previous Publ. patent JP 7148187

Abstract (Basic): EP 655222 A

A **prosthetic** device to occlude an **opening** present in a defective **interatrial septum** , the device comprising: at least two clips firmly grippe peripheral portions around the opening, with a flat occluder to close the opening present in the septum. At least two fasteners secure the clips to the flat occluder.

A prosthetic device according to claim 1. The occluder is a piece of fabric selected from the group consisting of a woven fabric, with a knitted fabric and a nonwoven fabric, the fabric being biocompatible. The occluder has a reinforcing rim extending thereon.

ADVANTAGE - There is no problem of setting the occluder offset with respect to the centre of the opening, unlike the prior art device comprising the two umbrella-shaped sheets. It is also not necessary to use an occluder twice as large as the opening, and there is no fear of breakage of springed ribs due to deterioration or fatigue thereof because the present device does not comprise any springed rib.

Dwg.1/6

Title Terms: PROSTHESIS; DEVICE; SEPTUM; DEFECT; REPAIR; TWO; CLIP; FIRM; GRIP; PERIPHERAL; PORTION; OPEN; FLAT; OCCLUDE; CLOSE; OPEN; TWO; FASTEN; SECURE; CLIP
Derwent Class: P31; P32
International Patent Class (Main): A61B-017/00; A61F-002/00; A61F-002/24
File Segment: EngPI
?

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Set     Items   Description
S1         22   AU=(MOWRY, D? OR MOWRY D?)
S2     128927   HEART OR VASCULAR OR BYPASS OR BY()PASS
S3          9   S1 AND S2
File 347:JAPIO Nov 1976-2005/Feb(Updated 050606)
         (c) 2005 JPO & JAPIO
File 350:Derwent WPIX 1963-2005/UD,UM &UP=200540
         (c) 2005  Thomson Derwent
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3/5/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015840404 **Image available**
WPI Acc No: 2003-902608/200382
XRPX Acc No: N03-720910
Trans myocardial implant delivery system for forming blood channel in heart wall has tool that extends within hollow sheath and which is attached at releasable manner to conduit end
Patent Assignee: HEARTSTENT CORP (HEAR-N)
Inventor: KOHLER R E; **MOWRY D H**
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20030220661	A1	20031127	US 2002153341	A	20020521	200382	B

Priority Applications (No Type Date): US 2002153341 A 20020521
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030220661	A1		16	A61B-017/08	

Abstract (Basic): US 20030220661 A1
NOVELTY - A portion of a conduit (110) that defines a blood flow channel from a **heart** chamber and to a coronary vessel is held at a releasable manner within a sheath (100). The conduit has a flexible portion (130) in fluid connection with the rigid portion (130) from an end opposite the outer end (112). A tool extends within the sheath which is attached at a releasable manner to the conduit end.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a blood forming method.
USE - For forming blood channel in **heart** wall from a **heart** chamber and to a coronary vessel during placement of trans myocardial implant between a coronary artery and left ventricle.
ADVANTAGE - Enables formation of a direct blood flow channel between **heart** chamber and coronary vessel. Size of implant is made to vary depending upon a vessel selected for a procedure and a myocardium thickness.
DESCRIPTION OF DRAWING(S) - The figure shows a front view of the transmyocardial implant delivery system.
Sheath (100)
Conduit (110)
Outer end (112)
Flexible portion (130)
Rigid portion (130)
pp; 16 DwgNo 2/18
Title Terms: TRANS; MYOCARDIUM; IMPLANT; DELIVER; SYSTEM; FORMING; BLOOD; CHANNEL; **HEART** ; WALL; TOOL; EXTEND; HOLLOW; SHEATH; ATTACH; RELEASE; MANNER; CONDUIT; END
Derwent Class: P31
International Patent Class (Main): A61B-017/08
File Segment: EngPI

3/5/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015703490 **Image available**
WPI Acc No: 2003-765683/200372

XRAM Acc No: C03-210244
XRPX Acc No: N03-613272
Vascular **implant for performing coronary vessel** bypass **procedures or forming blood flow paths in blood vessels, comprises scaffold and tubing**
Patent Assignee: KOHLER R E (KOHL-I); MOWRY D H (MOWR-I)
Inventor: KOHLER R E; **MOWRY D H**
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20030135260	A1	20030717	US 200252156	A	20020116	200372	B

Priority Applications (No Type Date): US 200252156 A 20020116
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030135260	A1		9	A61F-002/06	

Abstract (Basic): US 20030135260 A1
NOVELTY - A **vascular** implant (10) comprises a scaffold (50) defining an interior volume, a first end (54) and an opposite second end (56) and tubing (70) covering the scaffold.
DETAILED DESCRIPTION - A **vascular** implant comprises:
(1) scaffold defining an interior volume;
(2) first end;
(3) opposite second end; and
(4) tubing in covering the scaffold.
The scaffold has an exterior surface and an interior surface (60). The inner surface lines the interior volume. The scaffold interior surface is completely covered by the tubing from the first end to the second end. The scaffold exterior surface and the tubing define a lumen. The scaffold exterior surface is completely covered by the tubing from the first end to the second end.
An INDEPENDENT CLAIM is also included for a method of making a **vascular** implant comprising:
(1) providing tubing with first and second ends;
(2) providing a scaffold;
(3) covering the scaffold interior surface from the scaffold first end to the scaffold second end with the tubing; and
(4) completely covering the scaffold exterior surface from the scaffold first end to the scaffold second end with the tubing.
USE - The invention is used for performing coronary vessel **bypass** procedures or forming blood flow paths in a blood vessel, by forming a blood flow path from a **heart** chamber directly to the coronary vessel at a site in the vessel positioned between an obstruction in the vessel and the tissue of the **heart** to be supplied with blood by the vessel (claimed).
ADVANTAGE - The invention exhibits strength and integrity. It is able to withstand the muscular pressure exerted by systolic and diastolic contractions.
DESCRIPTION OF DRAWING(S) - The figure is a cross-sectional view of the implant.
Implant (10)
Scaffold (50)
First end (54)
Interior surface (60)
Tubing (70)
pp; 9 DwgNo 2/12
Title Terms: **VASCULAR** ; IMPLANT; PERFORMANCE; CORONARY; VESSEL; PROCEDURE; FORMING; BLOOD; FLOW; PATH; BLOOD; VESSEL; COMPRISE; SCAFFOLDING; TUBE
Derwent Class: A96; D22; P32
International Patent Class (Main): A61F-002/06

File Segment: CPI; EngPI

3/5/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015341841 **Image available**
WPI Acc No: 2003-402779/200338
XRPX Acc No: N03-321363
Medical catheter for insertion to heart **to provide stable passage in form of artificial shunt in** heart **wall, has hollow guide tube having opening and lumen sized to receive guide snare**
Patent Assignee: MOWRY D H (MOWR-I); O'CONNOR M G (OCON-I); SKUBITZ S P (SKUB-I)
Inventor: **MOWRY D H** ; O'CONNOR M G; SKUBITZ S P
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20030074006	A1	20030417	US 2001976258	A	20011011	200338	B

Priority Applications (No Type Date): US 2001976258 A 20011011
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030074006	A1		11	A61F-011/00	

Abstract (Basic): US 20030074006 A1
NOVELTY - A hollow diagnostic tube (102) has a lumen connecting its distal end to its proximal end. A hollow guide tube (104) has a lumen connecting its distal end to its proximal end, and includes an opening into the lumen. The opening and lumen of the guide tube is sized to receive a guide snare (130).
DETAILED DESCRIPTION - The guide tube which is shorter than the diagnostic tube is attached to the diagnostic tube such that the distal end of the guide tube is proximate the distal end of the diagnostic tube. INDEPENDENT CLAIMS are also included for the following:
(a) a method for positioning medical catheter within chamber of **heart** of patient; and
(b) a medical device for performing diagnostic procedures and other intervention procedures using catheter placed into patient's body.
USE - For insertion to **heart** to provide stable passage in form of artificial shunt in **heart** wall to connect **heart** chambers containing oxygenated blood with coronary artery.
ADVANTAGE - Improves efficiency in accessing shunts by using cardiac catheterization via femoral artery to position catheter within **heart** proximate shunt.
DESCRIPTION OF DRAWING(S) - The figure shows the close up view of the **heart** showing the distal end of the medical catheter within the left ventricle of the **heart** .
Diagnostic tube (102)
Guide tube (104)
Guide snare (130)
pp; 11 DwgNo 5/9
Title Terms: MEDICAL; CATHETER; INSERT; **HEART** ; STABILISED; PASSAGE; FORM; ARTIFICIAL; SHUNT; **HEART** ; WALL; HOLLOW; GUIDE; TUBE; OPEN; LUMEN; SIZE; RECEIVE; GUIDE; SNARE
Derwent Class: P32
International Patent Class (Main): A61F-011/00
File Segment: EngPI

3/5/4 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015332225 **Image available**
WPI Acc No: 2003-393160/200337
XRPX Acc No: N03-314259

Transmyocardial implant for directing blood flow between heart **chamber and coronary vasculature, has hollow rigid conduit with reinforcing wrap extended along section on outer surface of wall to define blood flow pathway**

Patent Assignee: HEARTSTENT CORP (HEAR-N); KOHLER R (KOHL-I); MOWRY D (MOWR-I); O'CONNOR M (OCON-I)
Inventor: KOHLER R; **MOWRY D H** ; O'CONNER M; **MOWRY D** ; O'CONNOR M
Number of Countries: 101 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20030069532	A1	20030410	US 2001972779	A	20011005	200337	B
WO 200330785	A1	20030417	WO 2002US31659	A	20021002	200337	
AU 2002334824	A1	20030422	AU 2002334824	A	20021002	200460	

Priority Applications (No Type Date): US 2001972779 A 20011005
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030069532	A1		10	A61M-005/00	
WO 200330785	A1	E		A61F-002/06	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW

AU 2002334824	A1			A61F-002/06	Based on patent WO 200330785

Abstract (Basic): US 20030069532 A1

NOVELTY - The transmyocardial implant (10) has a hollow rigid conduit (12) that has a reinforcing wrap (50) extended along a section on the outer surface (16) of a wall (14). The conduit defines a blood flow pathway (42) within the interior (18) of the wall between two open ends (28,30).

DETAILED DESCRIPTION - The conduit includes two portions (24,26) respectively defining the two open ends. The first portion (24) is received within a lumen (34) while the second portion (26) is extended from the coronary vasculature (36) through the myocardium (32) into the **heart** chamber (38). The second portion is made of a material rigid enough to resist deformation and closure of the pathway in response to the contraction of the myocardium. An INDEPENDENT CLAIM is also included for the coronary vessel **bypass** procedure using the transmyocardial implant.

USE - For directing blood flow between **heart** chamber and coronary vasculature.

ADVANTAGE - Establishes blood flow path through myocardium between **heart** chamber and lumen of coronary vasculature residing at exterior of myocardium. Includes a reinforcing wrap that resists crushing by contraction of the **heart** chamber and helps hold the conduit open. Ensures greater rigidity in the myocardial portion than in the vasculature portion.

DESCRIPTION OF DRAWING(S) - The figure is a side sectional view of

the transmyocardial implant shown in place in a human **heart** wall with the implant establishing direct blood flow path from the **heart** chamber to a coronary vessel.

Transmyocardial implant (10)
Conduit (12)
Wall (14)
Outer surface (16)
Interior (18)
Conduit portions (24,26)
Open ends (28,30)
Myocardium (32)
Lumen (34)
Coronary vasculature (36)
Heart chamber (38)
Blood flow pathway (42)
Reinforcing wrap (50)
pp; 10 DwgNo 1/8

Title Terms: IMPLANT; DIRECT; BLOOD; FLOW; **HEART** ; CHAMBER; CORONARY; HOLLOW; RIGID; CONDUIT; REINFORCED; WRAP; EXTEND; SECTION; OUTER; SURFACE ; WALL; DEFINE; BLOOD; FLOW; PATH
Derwent Class: P32; P34
International Patent Class (Main): A61F-002/06; A61M-005/00
File Segment: EngPI

3/5/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015320260 **Image available**
WPI Acc No: 2003-381195/200336
XRPX Acc No: N03-304580

Multi-lumen implant for passing blood directly between heart **chamber and coronary vessel, has flexible hollow conduits each having one end secured to rigid housing and another end sized to be secured to coronary vessel**

Patent Assignee: KOHLER R (KOHL-I); MOWRY D (MOWR-I); SCHORGL J (SCHO-I); PERCARDIA INC (PERC-N)
Inventor: KOHLER R; **MOWRY D** ; SCHORGL J
Number of Countries: 001 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20030069587	A1	20030410	US 2001971354	A	20011004	200336	B
US 6808504	B2	20041026	US 2001971354	A	20011004	200470	

Priority Applications (No Type Date): US 2001971354 A 20011004
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030069587	A1		11	A61M-005/00	
US 6808504	B2			A61M-005/00	

Abstract (Basic): US 20030069587 A1

NOVELTY - The multi-lumen implant (10) has a housing (12) with one end sized to extend through a **heart** wall and into the **heart** chamber. The housing is rigid enough to withstand contraction of the **heart** wall. Each of the flexible hollow conduits (14,16,18) has one end (30) secured to the housing and another end (40) sized to be secured to a coronary vessel.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) the kit used in the multi-coronary **bypass** procedure; and

(b) the multi-coronary **bypass** procedure using the multi-lumen implant.

USE - For passing blood directly between **heart** chamber and coronary vessel. Used in performing multi-vessel coronary **bypass** procedure.

ADVANTAGE - Includes rigid housing sized to be inserted into and retained within myocardium, and conduits rigid enough to withstand collapse in response to contraction forces of the myocardium. Uses conduits that are blood compatible. Enables surgeon to tailor the implant to the individual depending on the nature of the procedure and the condition of the individual's **heart** . Enables surgeon to select the number of flexible conduits as well as the length and inner diameter of each flexible conduit.

DESCRIPTION OF DRAWING(S) - The figure shows perspective view of the multi-lumen implant.

Multi-lumen implant (10)

Housing (12)

Conduits (14,16,18)

Ends of each conduit (30,40)

pp; 11 DwgNo 1/8

Title Terms: MULTI; LUMEN; IMPLANT; PASS; BLOOD; **HEART** ; CHAMBER; CORONARY ; VESSEL; FLEXIBLE; HOLLOW; CONDUIT; ONE; END; SECURE; RIGID; HOUSING; END; SIZE; SECURE; CORONARY; VESSEL

Derwent Class: P32; P34

International Patent Class (Main): A61M-005/00

International Patent Class (Additional): A61F-002/06

File Segment: EngPI

3/5/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

015207695 **Image available**

WPI Acc No: 2003-268231/200326

XRAM Acc No: C03-070076

XRPX Acc No: N03-213169

Catheter used in cardiac diagnosis and treatment, includes hollow cored catheter body defining inner and outer walls, and distal and proximal ends, and hub including opening aligned with the hollow core

Patent Assignee: HEARTSTENT CORP (HEAR-N); PERCARDIA INC (PERC-N); CONRAD T R (CONR-I); KOHLER R (KOHL-I); MOWRY D (MOWR-I); KOHLER R E (KOHL-I); O'CONNOR M G (OCON-I); SKUBITZ S P (SKUB-I)

Inventor: CONRAD T R; KOHLER R; **MOWRY D H** ; O'CONNOR M G; SKUBITZ S P; **MOWRY D** ; KOHLER R E

Number of Countries: 102 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200315638	A2	20030227	WO 2002US26226	A	20020815	200326	B
US 20030036698	A1	20030220	US 2001931655	A	20010816	200326	
US 20030114832	A1	20030619	US 200123314	A	20011214	200341	
EP 1424943	A1	20040609	EP 2002794919	A	20020815	200438	
			WO 2002US26226	A	20020815		
AU 2002332568	A1	20030303	AU 2002332568	A	20020815	200452	
US 20040210190	A1	20041021	US 2001931655	A	20010816	200470	
			US 2004844372	A	20040513		
US 20050101903	A1	20050512	US 2001931655	A	20010816	200532	
			US 2004844372	A	20040513		
			US 2004983653	A	20041109		

Priority Applications (No Type Date): US 200123314 A 20011214; US 2001931655 A 20010816; US 2004844372 A 20040513; US 2004983653 A 20041109

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200315638	A2	E	60	A61B-017/00	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW					
Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW					
US 20030036698	A1			A61B-006/00	
US 20030114832	A1			A61M-025/01	
EP 1424943	A1	E		A61B-017/00	Based on patent WO 200315638
Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR					
AU 2002332568	A1			A61B-017/00	Based on patent WO 200315638
US 20040210190	A1			A61B-006/00	Cont of application US 2001931655
US 20050101903	A1			A61M-005/00	Cont of application US 2001931655 Cont of application US 2004844372

Abstract (Basic): WO 200315638 A2

NOVELTY - A catheter includes a hollow cored catheter body defining an inner wall, an outer wall, distal and proximal ends; and hub attached to the proximal end. The hub includes an opening aligned with the hollow core of the catheter body. The catheter body is formed into primary or secondary curves. The primary curve traverses an arc of 140-180 degrees, while the second arc traverses at arc of 60-120 degrees.

DETAILED DESCRIPTION - A catheter (14) includes hollow cored catheter body defining an inner wall, an outer wall, distal and proximal ends; and hub (142, 152) attached to the proximal end. The hub includes an opening aligned with the hollow core of the catheter body. The catheter body is formed into primary or secondary curves. The primary curve traverses an arc of 140-180 degrees. The first and second lengths of the hollow cored member define a first plane. The second arc traverses at arc of 60-120 degrees. The second plane is defined by the second and third lengths of the hollow cored member lies at 10-50 degrees from the first plane.

An INDEPENDENT CLAIM is included for a method of passing a fluid through a shunt in a **heart** wall by providing a hollow catheter into a chamber of **heart** where the shunt is located, aligning the distal end of the catheter with the first end of the shunt, and passing the fluid through the catheter and through the shunt into the coronary artery.

USE - The catheter is used in cardiac diagnosis and treatment.

ADVANTAGE - The inventive catheter provides the ability to stabilize the catheter within the **heart** chamber and facilitate the alignment of the catheter with the device in the **heart** wall.

DESCRIPTION OF DRAWING(S) - The figure is a side view of an assembled catheter.

Catheter (14)
Basket (102)
Inner tube (106)
Outer sheath (108)
Hub (142, 152)
Curves (146, 148)
pp; 60 DwgNo 1/44

Title Terms: CATHETER; CARDIAC; DIAGNOSE; TREAT; HOLLOW; CORE; CATHETER; BODY; DEFINE; INNER; OUTER; WALL; DISTAL; PROXIMITY; END; HUB; OPEN;

ALIGN; HOLLOW; CORE
Derwent Class: B04; P31; P34
International Patent Class (Main): A61B-006/00; A61B-017/00; A61M-005/00; A61M-025/01
International Patent Class (Additional): A61M-025/00; A61M-031/00
File Segment: CPI; EngPI

3/5/7 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014967951 **Image available**
WPI Acc No: 2003-028465/200302
XRAM Acc No: C03-006551
XRPX Acc No: N03-022331

Anastomosis device for performing coronary artery bypass **surgery, has conduit with resilient flange which is inserted and fitted into blood vessel, when in compressed and expanded orientations respectively**

Patent Assignee: HEARTSTENT CORP (HEAR-N); MOWRY D H (MOWR-I); SCHORGL J M (SCHO-I)
Inventor: **MOWRY D H** ; SCHORGL J M
Number of Countries: 100 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20020099392	A1	20020725	US 2001768930	A	20010124	200302	B
WO 200258567	A2	20020801	WO 2002US1595	A	20020118	200302	
AU 2002241928	A1	20020806	AU 2002241928	A	20020118	200427	

Priority Applications (No Type Date): US 2001768930 A 20010124
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020099392	A1		11	A61B-017/08	
WO 200258567	A2	E		A61B-017/11	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

AU 2002241928	A1			A61B-017/11	Based on patent WO 200258567

Abstract (Basic): US 20020099392 A1

NOVELTY - A biocompatible conduit (14) has a resilient flange at its back end (32), which is movable between compressed and expanded orientations. The flange is inserted into a blood vessel, when it is in compressed orientation. The flange is projected radially outward from the conduit when in expanded orientation, so that the flange is fitted into the blood vessel.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for method of providing connection with blood vessel using anastomosis device.

USE - Anastomosis device used for providing communication of fluid such as blood between blood vessels or with other anatomical structures such as chamber of **heart** in coronary artery **bypass** surgery.

ADVANTAGE - The resilient flange enables easy insertion and fitting of the anastomosis device into the blood vessel without complex manual manipulation or use of specific tools. Therefore, a simple and efficient anastomosis device is achieved.

DESCRIPTION OF DRAWING(S) - The figure shows a sectional side view of the anastomosis device.

Band end of biocompatible conduit (32)
Biocompatible conduit (14)
pp; 11 DwgNo 1/10
Title Terms: ANASTOMOSIS; DEVICE; PERFORMANCE; CORONARY; ARTERY; SURGICAL; CONDUIT; RESILIENT; FLANGE; INSERT; FIT; BLOOD; VESSEL; COMPRESS; EXPAND; ORIENT; RESPECTIVE
Derwent Class: A96; D22; P31
International Patent Class (Main): A61B-017/08; A61B-017/11
File Segment: CPI; EngPI

3/5/8 (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014798214 **Image available**
WPI Acc No: 2002-618920/200266
XRPX Acc No: N02-490072
Blood flow supplement method for cardiovascular system of patient, involves occluding two interstitial passageways between two blood vessels to prevent blood flow through the interstitial passageways
Patent Assignee: MOWRY D H (MOWR-I)
Inventor: **MOWRY D H**
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20020099404	A1	20020725	US 2001769746	A	20010125	200266	B

Priority Applications (No Type Date): US 2001769746 A 20010125
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020099404	A1		26	A61M-029/00	

Abstract (Basic): US 20020099404 A1
NOVELTY - The method involves guiding a catheter (102) through interstitial passageways formed between first and second locations within a second coronary vessel in a cardiovascular system (111). The second location is distal to an obstruction in second coronary vessel. The interstitial passageway is occluded between blood vessels to prevent blood flow through interstitial passageways.
DETAILED DESCRIPTION - The catheter is inserted into the vasculature of a patient and advanced to a first location within a first coronary vessel in the cardiovascular system. A blood flow path is formed from a **heart** chamber directly to the second coronary vessel.
USE - For supplementing flow of blood to a portion of the cardiovascular system of patient during treatment of e.g. coronary artery disease.
ADVANTAGE - Allows intravascular coronary artery **by - pass** procedure by providing direct flow path from **heart** chamber to the coronary artery without causing tissue damage to the patient.
DESCRIPTION OF DRAWING(S) - The figure shows the high-level schematic illustration of the intravascular catheter being advanced through the patient's **vascular** system.
Catheter (102)
Cardiovascular system (111)
pp; 26 DwgNo 1/4
Title Terms: BLOOD; FLOW; SUPPLEMENT; METHOD; CARDIOVASCULAR; SYSTEM; PATIENT; OCCLUDE; TWO; INTERSTITIAL; PASSAGE; TWO; BLOOD; VESSEL; PREVENT ; BLOOD; FLOW; THROUGH; INTERSTITIAL; PASSAGE

Derwent Class: P34
International Patent Class (Main): A61M-029/00
File Segment: EngPI

3/5/9 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014614701 **Image available**
WPI Acc No: 2002-435405/200246
XRAM Acc No: C02-123657
XRPX Acc No: N02-342748

Flexible transmyocardial implant for coronary artery bypass **procedure, comprises flexible conduit secured to and wrapped around rigid conduit for defining blood flow path by flexible conduit-uninterrupted surfaces**

Patent Assignee: HEARTSTENT CORP (HEAR-N); MOWRY D H (MOWR-I); VANNEY G P (VANN-I)
Inventor: **MOWRY D H** ; VANNEY G P
Number of Countries: 097 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200230325	A2	20020418	WO 2001US31614	A	20011010	200246	B
US 20020103534	A1	20020801	US 2000304208	P	20001011	200253	
			US 2001975740	A	20011010		
AU 200211586	A	20020422	AU 200211586	A	20011010	200254	

Priority Applications (No Type Date): US 2000686245 A 20001011; US 2000304208 P 20001011; US 2001975740 A 20011010
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200230325	A2	E	15	A61F-002/02	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

US 20020103534 A1		A61F-002/06	Provisional application US 2000304208
AU 200211586 A			Based on patent WO 200230325

Abstract (Basic): WO 200230325 A2

NOVELTY - An implant (10) comprises hollow rigid conduit (HRC) (12) and synthetic flexible conduit (SFC) (14). HRC is rigid to withstand collapsing in response to contraction forces of **heart** wall, and is adapted to be inserted into and retained within **heart** chamber-wall containing oxygenated blood. SFC is bonded to and wrapped around HRC for blood flow path to be defined by uninterrupted surfaces of SFC.

DETAILED DESCRIPTION - An implant (10) comprises hollow rigid conduit (HRC) (12) and synthetic flexible conduit (SFC) (14). HRC is rigid to withstand collapsing in response to contraction forces of **heart** wall, and is adapted to be inserted into and retained within **heart** chamber-wall containing oxygenated blood. SFC is bonded to and wrapped around HRC for blood flow path to be defined by uninterrupted surfaces of SFC. One end of SFC is secured to HRC for blood flow from chamber to SFC and an other end is secured to coronary vessel. HRC is in blood-flow communication with blood contained within the chamber. The other end of SFC is secured to coronary vessel with an opening to produce blood flow communication within the lumen of coronary vessel.

HRC and SFC defined a blood flow path between the openings at the ends. HFC has a surface compatible to blood flow.

USE - As flexible myocardial implant for use in a coronary artery **bypass** procedure, for passing blood flow directly between a chamber of **heart** and coronary vessel.

ADVANTAGE - HRC is sufficiently rigid to withstand collapsing in response to contraction forces of the **heart** wall. The flexible conduit is blood compatible.

DESCRIPTION OF DRAWING(S) - The figure shows the sectional view of the implant.

Implant (10)
Hollow rigid cylindrical conduit (12)
Flexible conduit (14)
Upper end of rigid conduit (16)
Lower end of rigid conduit (18)
Ends of flexible conduit (30,32)
Open blood flow path (60)
pp; 15 DwgNo 1/11

Title Terms: FLEXIBLE; IMPLANT; CORONARY; ARTERY; PROCEDURE; COMPRISE; FLEXIBLE; CONDUIT; SECURE; WRAP; RIGID; CONDUIT; DEFINE; BLOOD; FLOW; PATH; FLEXIBLE; CONDUIT; UNINTERRUPTED; SURFACE

Derwent Class: A96; D22; P32; P34

International Patent Class (Main): A61F-002/02; A61F-002/06

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